



## **TRANS TECH CONSULTANTS**

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May 24, 2005  
Job No. 3057.01

Mr. Phillip Ostler  
Fern Cafe  
55 North Venice Blvd., Suite 503  
Venice, California 90291-4142

**Subject: Results of Investigation**  
**Fern Café - 606 Main Street, Ferndale, California**  
**LOP# 12378; NCRWQCB Case # 1THU378**

Dear Mr. Ostler:

This report presents the results of Trans Tech Consultants soil and groundwater investigation performed at the subject site. The subject site is approximately located as shown on the Site Location Map, Plate 1. The work was performed in accordance with our February 16, 2005, Work Plan, and subsequent comments made in a March 1, 2005, letter from Robert Stone of the Humboldt County Department of Health and Human Services Division of Environmental Health (HCDHHS-DEH).

### **Background**

We understand that on September 11, 1991, Ray Habersstock Construction Company excavated two 300-gallon underground storage tanks (UST's) from a common excavation and one approximately 600-gallon UST from a separate excavation.<sup>1</sup> All three tanks were reportedly rusted through. Selvage, Hebre, and Nelson (SHN) collected soil and groundwater samples, under the direction of Mr. Kevin Metcalf, with the HCDHS-DEH. SHN presented the results in a Phase 1 Preliminary Investigation and Evaluation Report, dated October 1991.<sup>2</sup>

### **300-Gallon UST's**

As part of the tank removal sampling, one soil sample was reportedly collected from beneath each 300-gallon UST. Soil sample Tank 1 85-88" was reportedly collected from beneath the first 300-gallon UST at approximately 7 feet below ground surface (BGS) and soil sample Tank 2 63-67" was reportedly collected from beneath the second 300-gallon UST at approximately 5 feet BGS. SHN reported that the southeast sidewall appeared clean and the remaining sidewalls appeared to be

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<sup>1</sup> Previous correspondence inadvertently reported the tanks as two 500 gallon and one 800 gallon tank.

<sup>2</sup> SHN Report, Fern Café Phase 2 Soil and Groundwater Investigation Work Plan, May 1993.

impacted. Due to limited storage space onsite, a portion of the impacted soil was removed. Soil sample TP-1 8'4"-8'8" was reportedly collected from the east sidewall and soil sample TP-1 9'9" was collected from the base of the common excavation for the two 300-gallon UST's (easterly excavation). One composite soil sample was reportedly collected from the stockpiled soils from the easterly excavation and labeled TP-1 8'-10'. Groundwater was observed in the excavation at approximately 10 feet BGS and a sample was collected and labeled TP-1 9'11.5".

### **600-Gallon UST's**

After the removal of the 600 gallon UST (Tank 3), soil sample Tank 3 63-65" was reportedly collected from beneath the UST at approximately 5 feet BGS. SHN reportedly observed the removal of additional soil from the 600-gallon UST excavation and reported that the southeast and northwest sidewalls appeared "clean" and that the remaining sidewalls were obviously contaminated. Additional soil was not removed due to the lack of onsite storage space. Soil samples TP-2 5'6" West and TP-2 9'4" West were collected from the west sidewall of the excavation and soil sample TP-2 5'6" North was collected from the north sidewall. One composite soil sample was collected from the soil stockpile and labeled TP-2 8'-10'. Groundwater was observed at 9'4" BGS and a sample was collected from the excavation and labeled TP-2 9'4".

Soil and groundwater samples were submitted to North Coast Laboratories for analysis of total petroleum hydrocarbons (TPH) as gasoline (g), TPH as diesel (d), and benzene, toluene, ethylbenzene, and xylenes (BTEX). The laboratory results are presented below in Table 1 and are expressed in milligrams per kilogram (mg/Kg), micrograms per kilogram ( $\mu\text{g/Kg}$ ), and micrograms per liter ( $\mu\text{g/L}$ ).

**Table 1 - Tank Excavation Sample Results - September 1991**

| Sample ID                     | TPH-g           | TPH-d | B                            | T       | E       | X       |
|-------------------------------|-----------------|-------|------------------------------|---------|---------|---------|
| Soil Samples                  | -----mg/Kg----- |       | ----- $\mu\text{g/Kg}$ ----- |         |         |         |
| Tank 1 85"-88" <sub>1,2</sub> | 3,300           | 130   | 8,300                        | <10     | 31,000  | 62,000  |
| Tank 2 63"-67" <sub>1,2</sub> | 1,800           | 71    | <0.5                         | <10     | <10     | <10     |
| Tank 3 63"-65" <sub>1,2</sub> | 410             | 38    | <1.0                         | <1.0    | <10     | <10     |
| TP-2 5'6" West                | <1.0            | <1.0  | 15                           | <0.0050 | <0.020  | <0.020  |
| TP-2 5'6" North               | 4.3             | <1.0  | 13                           | <0.010  | <0.10   | <0.10   |
| TP-2 9'4" West                | <1.0            | <1.0  | <0.0050                      | <0.0050 | <0.0050 | <0.0050 |
| TP-1 9'9"                     | <1.0            | <1.0  | <0.0050                      | <0.0050 | <0.0050 | <0.0050 |



**Table 1 Cont'd- Tank Excavation Sample Results - September 1991**

| Sample ID   | TPH-g           | TPH-d | B               | T       | E       | X      |
|---|-----------------|-------|-----------------|---------|---------|--------|
| Soil Samples  | -----mg/Kg----- |       | -----µg/Kg----- |         |         |        |
| TP-1 8'4"-8'8" <sub>2</sub>   | 37              | <1.0  | 230             | <0.10   | <0.10   | <0.10  |
| TP-2 9'4" North   | <1.0            | <1.0  | <0.0050         | <0.0050 | <0.0050 | <0.005 |
| Water Samples   | -----µg/l-----  |       |                 |         |         |        |
| TP-1 9'11.5"  | 110             | <50   | <0.50           | <0.50   | 1.2     | 2.3    |
| TP-2 9'4" <sub>2</sub>  | 1,100           | <50   | 2.5             | <5.0    | 9.7     | 22     |
| < = Less than the indicated laboratory reporting limit.<br>1 = The laboratory reported that these samples contained material lighter than diesel and reported only the amount in the diesel range of molecular weights.<br>2 = The laboratory indicated that the detection limits were raised due to matrix interference. |                 |       |                 |         |         |        |

In October 1994, TTC advanced seven soil borings ( SB-3 through SB-6, SB-8, SB-10, and SB-11) at the approximate locations shown on Plate 2. We were unable to drill borings SB-1, SB-2, SB-7, and SB-9 below depths of 1 to 2.5 feet BGS and no soil samples were collected from these borings. Two soil samples were collected from each boring for chemical analysis of TPH-g, BTEX, and total lead.

Based on the results of the soil investigation, and previous available information, three monitoring wells (MW-1 through MW-3) were installed by TTC in May 1995. Groundwater samples were collected from the wells and analyzed for TPH-g, BTEX, and total lead. The results of both the soil and groundwater investigation were presented in our August 2, 1995, *Summary Report, Supplemental Investigation*. The analytical results are tabulated in Table 2, page 4.



**Table 2 - Laboratory Analytical Results from October 1994 Investigation**

| Boring     | Depth<br>in<br>Feet | TPH-g | B      | T      | E     | X      | Total<br>Lead |
|------------|---------------------|-------|--------|--------|-------|--------|---------------|
|            |                     | mg/Kg | mg/Kg  |        |       |        | mg/Kg         |
| SB-3       | 5.0                 | 4.0   | 110    | 17     | 29    | 29     | 6.2           |
|            | 7.5                 | 6.8   | 75     | 7.5    | 100   | 26     | 5.6           |
| SB-4       | 5.0                 | 1.8   | 54     | 22     | 27    | 110    | 7.0           |
|            | 7.5                 | 1.2   | 22     | 10     | <2.5  | 10     | 5.4           |
| SB-5       | 5.0                 | <2.5  | <2.5   | <2.5   | <2.5  | <2.5   | 6.2           |
|            | 7.5                 | 4.1   | <2.5   | <2.5   | <2.5  | <2.5   | 5.4           |
| SB-6       | 5.0                 | 2,300 | 33,000 | <1,200 | 3,000 | 24,000 | 14            |
|            | 7.5                 | 1,400 | 3,600  | 1,600  | 6,100 | 6,100  | 8.6           |
| SB-8       | 5.0                 | 17    | 520    | 85     | 43    | 170    | 6.7           |
|            | 7.5                 | 50    | 390    | 73     | 32    | 120    | 6.4           |
| SB-10      | 5.0                 | 1.2   | 19     | 2.8    | <2.5  | 13     | 11            |
|            | 8.5                 | <1.0  | 18     | <2.5   | <2.5  | <2.5   | 8.3           |
| SB-11      | 5.0                 | <1.0  | <2.5   | <2.5   | <2.5  | <2.5   | 7.3           |
|            | 7.5                 | 13    | 150    | 56     | 30    | 84     | 6.6           |
| B-1 (MW-1) | 7.5                 | <0.20 | <1     | <1     | 1.6   | <2     | <4.9          |
| B-2 (MW-2) | 6.5                 | 1.3   | 60     | 5.2    | 4     | 12     | 10.4          |
| B-3 (MW-3) | 6.5                 | 10    | 74     | 28     | 21    | 38     | 9.45          |
| B-4        | 7.5                 | 0.88  | 8.2    | 41     | 4     | 13     | 12.7          |

<1 = Less than the indicated laboratory reporting limit.

In order to further assess the groundwater impact southeast of previously identified soil impact TTC proposed three hydropunch borings in a November 9, 1997, Work Plan. On July 22, 1998, TTC observed the drilling of hydropunch soil borings (B-1 through B-3) to depths of approximately 15 feet BGS at the approximate locations shown on Plate 2. In addition, a soil boring was drilled adjacent to hydropunch soil boring B-1 and completed as groundwater monitoring well MW-4. A total of six soil samples and three groundwater samples were collected for laboratory chemical analysis. The samples were analyzed for TPH-g, BTEX and total lead. No soil samples were collected from MW-4. The laboratory chemical results of the hydropunch investigation were presented in our October 6, 1998, *Summary Report Additional Groundwater Investigation*. The analytical result are also tabulated in Table 3, page 5.



**Table 3: Soil Sample Analytical Results - July 1998 Investigation**

| Boring  | Depth in Feet | TPH-g | B               | T  | E  | X  | Total Lead |
|---|---------------|-------|-----------------|----|----|----|------------|
|   |               | mg/Kg | -----µg/Kg----- |    |    |    | mg/Kg      |
| B-1   | 5.0           | ND    | ND              | ND | ND | ND | 9.0        |
| B-1   | 10.0          | ND    | ND              | ND | ND | ND | 11.0       |
| B-2   | 5.0           | ND    | ND              | ND | ND | ND | 8.0        |
| B-2   | 10.0          | ND    | ND              | ND | ND | ND | 6.0        |
| B-3   | 5.0           | ND    | ND              | ND | ND | ND | 8.0        |
| B-3   | 10.0          | ND    | ND              | ND | ND | ND | 6.0        |
| ND = Analyte not detected above the laboratory reporting limit. |               |       |                 |    |    |    |            |

**Table 3 Cont'd: Groundwater Sample Analytical Results - July 1998 Investigation**

| Boring  | TPH-g | B               | T  | E  | X  | Total Lead |
|---|-------|-----------------|----|----|----|------------|
|   | mg/Kg | -----µg/Kg----- |    |    |    | mg/Kg      |
| B-1-GW  | ND    | ND              | ND | ND | ND | ND         |
| B-1-GW  | ND    | ND              | ND | ND | ND | ND         |
| B-2-GW  | ND    | ND              | ND | ND | ND | ND         |
| ND = Analyte not detected above the laboratory reporting limit. |       |                 |    |    |    |            |

To further investigate and delineate the extent of the groundwater impact in the northwesterly, westerly, and southerly directions, TTC proceeded with an additional soil and groundwater investigation at the subject site. On October 9, 2002, Clear Heart Drilling advanced 2 soil borings (SB-12 and SB-13) and installed 2 groundwater monitoring wells (MW-5 and MW-6) at the approximate locations shown on Plate 2. The soil and groundwater samples collected from the borings and wells were analyzed for TPH-g, TPH-d, BTEX, and methyl tert butyl ether (MTBE). The results of the investigation were presented in our April 14, 2004 Summary Report and are tabulated on Tables 4 and 5, page 6.



**Table 4: Soil Sample Analytical Results - October 2002**

| Date   | Sample ID   | TPH-g           | TPH-d | B      | T      | E      | X      | MTBE   |
|--|-------------|-----------------|-------|--------|--------|--------|--------|--------|
|  |             | -----mg/Kg----- |       |        |        |        |        |        |
| 10/09/02   | MW-5-4'     | <1.0            | <5.0  | <0.005 | <0.005 | <0.005 | <0.015 | <0.025 |
|  | MW-5-7'     | <1.0            | <5.0  | <0.002 | <0.002 | 2.0    | 4.4    | <0.002 |
|  | SB-12-4'    | 1.1             | <5.0  | <0.002 | <0.002 | <0.002 | 3.9    | <0.002 |
|  | SB-12-9'    | 25              | 22*   | 0.047  | 0.16   | 0.099  | 0.43   | <0.050 |
|  | SB-12-13.5' | <1.0            | <5.0  | <0.005 | <0.005 | <0.005 | <0.015 | <0.025 |
|  | SB-13-4'    | <1.0            | <5.0  | <0.005 | <0.005 | <0.005 | <0.015 | <0.025 |
|  | SB-13-9'    | <1.0            | <5.0  | <0.002 | <0.002 | <0.002 | 3.8    | <0.002 |
|  | MW-6-4'     | <1.0            | <5.0  | <0.005 | <0.005 | <0.005 | <0.015 | <0.025 |
|  | MW-6-9'     | <1.0            | <5.0  | <0.002 | <0.002 | <0.002 | 4.1    | <0.002 |
| * = Higher boiling point constituents of weathered gasoline are present.<br><1 = Less than the indicated laboratory reporting limit. |             |                 |       |        |        |        |        |        |

**Table 5: Groundwater Sample Analytical Results - October and December 2002**

| Date  | Sample ID | TPH-g          | TPH-d  | B     | T     | E     | X     | MTBE    |
|---|-----------|----------------|--------|-------|-------|-------|-------|---------|
|   |           | -----µg/L----- |        |       |       |       |       |         |
| 10/09/02  | SB-12     | 3,800          | 1,600* | <1.0  | <1.0  | 3.0   | <1.0  | <1.0**  |
|   | SB-13     | 60             | <50    | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  |
| 10/24/02  | SB-14     | 60             | NA     | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  |
| 12/04/02  | MW-1      | <50            | <50    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
|   | MW-2      | <50            | <50    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
|   | MW-3      | 210            | 86     | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
|   | MW-4      | <50            | <50    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
|   | MW-5      | <50            | <50    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
|   | MW-6      | <50            | <50    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** |
| <1 = Less than the indicated laboratory reporting limit.<br>NA = Sample not analyzed<br>* = Higher boiling point constituents of weathered gasoline are present (see laboratory report for details).<br>** = Lead scavengers and additional fuel oxygenates were not detected above the laboratory reporting limit. |           |                |        |       |       |       |       |         |





On December 3, 2003, Beacom Construction of Fortuna, California mobilized a backhoe to the site to excavate impacted soil from beneath the former dispenser island at the subject site. The location of the former dispenser island and the approximate limits of the December 2003 excavation are shown on Plate 2. Soil samples were collected from the excavation limits, and a two-point composite sample was collected from the excavated soil. The soil samples were analyzed for TPH-d, BTEX and MTBE. The results of the investigation were presented in our January 16, 2004 Summary Report and the analytical results are tabulated on Table 6, below.

**Table 6: Pump Island Excavation Sample Results - December 2003**

| Date   | Sample ID  | TPH-g | TPH-d | B       | T       | E       | X       | MTBE |
|--|------------|-------|-------|---------|---------|---------|---------|------|
| -----mg/kg-----  |            |       |       |         |         |         |         |      |
| 12/03/03   | SW-NE-6.5' | 88    | 15    | <0.030  | <0.030  | <0.030  | <0.12   | <1.0 |
|  | SW-NW-7.5' | 3.0   | 1.5   | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <1.0 |
|  | B-9.5'     | 7.3   | <1.0  | 0.32    | 0.064   | 0.21    | 0.88    | <1.0 |
|  | SW-W-6'    | 26    | 2.5   | 0.070   | <0.030  | <0.030  | <0.090  | <1.0 |
|  | SW-SE-9.5' | 110   | 46    | <0.060  | <0.060  | <0.060  | <0.18   | <1.0 |
|  | SP-A,B     | 500   | 23    | <0.75   | <0.75   | <0.75   | <2.2    | <1.5 |
| < Indicates less than the laboratory reported detection limit. |            |       |       |         |         |         |         |      |

A total of 79.55 tons of impacted soil was removed from beneath the former dispenser location. The material was disposed of at the Bio-Industries Inc. facility in Red Bluff, California. Impacted soil was removed from the excavation until field readings indicated concentrations less than 100 ppm. Analysis results from the base and sidewall of the final excavation limits ranged from 3.0 to 110 mg/kg. The excavation was backfilled and resurfaced with concrete.

Groundwater samples have been collected, and flow directions measured, from the monitoring wells on a regular basis since their installation. The monitoring period has extended from May 1995 (MW-1 through MW-3), July 1998 (MW-4), and October 2002 (MW-5 and MW-6). The concentrations have fluctuated over the years and it has become evident that the contaminant concentrations have generally decreased over time. The historical groundwater flow direction results are attached in Appendix A and the historical groundwater analytical data is attached in Appendix B.



### **Site Description**

The western half of the subject property is relatively flat, while the eastern half slopes gently to the east. The site is located approximately 1/8 mile east of Francis Creek, and is bounded on the northeast by a private residence, on the northwest by Main Street, on the southeast by a lumber yard, and on the southwest by Shaw Avenue. The property contains one structure and two larger contiguous buildings which house a variety of small businesses, including the former Fern Café.

### **Geology**

Published geologic maps indicate that the site is underlain by estuarine deposits consisting of silty sands and clayey silts. Underlying the estuarine deposits is the Hookton formation, consisting of weakly consolidated marine sands with minor pebbly beds and clay strata. During the tank removal, silt and silty clay was found beneath approximately two feet of fill material to a depth of approximately 12 feet below ground surface (BGS). Based on topography, and the results of this investigation, local groundwater flow direction is predominantly to the northeast. Groundwater levels in the monitoring wells have historically ranged from approximately 4 to 9 feet BGS.

### **Recent Field Activities**

On May 5, 2005, Clear Heart Drilling advanced 4 soil borings (SB-15 and SB-18) at the approximate locations shown on Plate 2. The work was performed to further investigate the extent and concentrations of the groundwater impact in the vicinity of SB-12 and to the north and west of the former UST's and pump island. The work was performed under permit from Humboldt County, and the California Department of Transportation (CalTrans). The soil borings were advanced to approximately 15 feet BGS using truck mounted 6-inch hollow stem auger equipment. Our geologist observed the drilling procedures and obtained soil samples at maximum depth intervals of five feet, at pronounced changes in soil type, from zones of obvious contamination, and from just above free groundwater. A relatively shallow underground utility was encountered while drilling boring SB-15 and an unidentified wood object was encountered while drilling boring SB-17. The soil borings were subsequently re-located within a few feet of their original positions. Two soil samples from borings SB-15 and SB-16 and one soil sample from SB-17 and SB-18 were collected for laboratory chemical analysis. The samples were collected by using a 2-inch inside diameter split spoon sampler lined with clean stainless steel sample tubes. Temporary screens were placed in the borings for the collection of grab water samples. The soils encountered in the soil borings are shown graphically on the boring Logs, Plates A-D, and were classified in accordance with the Unified Soil Classification System. In general, soils encountered consisted of brown clayey silt from just below the ground surface to approximately 3-4 feet BGS. The clayey silt is underlain to approximately 15 feet BGS, the maximum depth explored, by greyish, brownish, soft clayey silt with sand. Previous geologic research indicates that near-surface soils are predominantly silt with some clay and sand.





Groundwater was encountered in the borings between approximately 10 and 13 feet BGS. Grab groundwater samples were collected from each boring and were submitted for laboratory chemical analysis.

Samples collected for laboratory chemical analysis were recovered in pre-cleaned, 2-inch stainless steel tubes. Upon recovery, secondary samples were obtained from the tubes using an Encore® sample hammer and 5 milligram Encore® sample containers pursuant with Environmental Protection Agency (EPA) 5035 protocols. After Encore® sample recovery, the sample remaining in the stainless steel tube was capped with non-adhesive silicon tape and plastic caps, labeled, stored on ice, and transported with the Encore® sample tubes and under chain-of-custody to Alpha Analytical Laboratories (Alpha) of Ukiah, California within 24 hours for Encore® sample preservation.

Sampling equipment was cleaned with a phosphate-free detergent solution and double rinsed with clean water between sampling events. Drilling and sampling equipment was pressure washed between borings. At the completion of drilling activities, soil borings SB-15 and SB-16 were abandoned by tremie grouting with a cement/bentonite grout and capped with sand and asphalt. Soil borings SB-17 and SB-18 were abandoned by filling with bentonite chips and hydrating in approximate 3 foot lifts and capping with sand and asphalt. The soil cuttings generated during the investigation were placed in 55-gallon drums and stored onsite, pending disposal. Rinse water generated by the field investigation was contained in a wooden frame lined with 6 mil plastic sheets and pumped into 55-gallon drums and stored onsite, pending disposal.

### **Laboratory Analytical Results**

Two soil samples from borings SB-15 and SB-16 and one soil sample from SB-17 and SB-1 were submitted to Alpha. Grab groundwater samples collected from the borings were also submitted to Alpha. Alpha is a State certified laboratory for the analyses requested. The soil samples collected were analyzed for TPH-g, TPH-d, BTEX, and MTBE using EPA Test Method 8260. One soil sample per boring was collected pursuant to EPA Test Method 5035 protocol and preserved by the laboratory within 48 hours of collection. The groundwater samples collected from the monitoring wells were analyzed by Alpha for TPH-g, TPH-d, BTEX, MTBE and the additional five oxygenated fuel additives using EPA Test methods 8020, 8015, 8260B, respectively. In addition, one soil sample was analyzed for total lead. Chain-of-custody documentation was maintained throughout the project. The laboratory analytical results of the soil and groundwater samples collected are presented in Tables 7 and 8, page 11. The Alpha laboratory analytical reports including the chain of custody documentation are presented in Appendix A.



**Table 7: Soil Sample Analytical Results - May 2005**

| Date  | Sample ID   | TPH-g           | TPH-d | B       | T       | E       | X       | MTBE    |
|---|-------------|-----------------|-------|---------|---------|---------|---------|---------|
|   |             | -----mg/Kg----- |       |         |         |         |         |         |
| 05/05/05  | SB-15-8.5'  | 7.0             | 130   | <0.17*  | <0.17*  | <0.17*  | <0.17*  | <0.17*  |
|   | SB-15-13'   | <1.0            | <1.0  | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
|   | SB-16-10.5' | 1.1             | <2.0* | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
|   | SB-16-14'   | 1.5             | <3.0* | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
|   | SB-17-10'   | 8.1             | <3.0* | 0.016   | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
|   | SB-18-10'   | <1.0            | <1.0  | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 |
| <1 = Less than the indicated laboratory reporting limit.<br>* = The reporting limits for this analysis have been raised to account for matrix interference. |             |                 |       |         |         |         |         |         |

**Table 8: Groundwater Sample Analytical Results - October/December 2002**

| Date  | Sample ID | TPH-g          | TPH-d | B     | T     | E     | X     | MTBE  |
|---|-----------|----------------|-------|-------|-------|-------|-------|-------|
|   |           | -----µg/L----- |       |       |       |       |       |       |
| 05/05/05  | SB-15     | 1,300          | <50   | 0.81  | 0.73  | 0.70  | 0.75  | <0.50 |
|   | SB-16     | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 |
|   | SB-17     | 1,200          | 110   | 160   | <6.0* | <10*  | <10*  | <10*  |
|   | SB-18     | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 |
| <1 = Less than the indicated laboratory reporting limit.<br>* = The reporting limits for this analysis have been raised to account for matrix interference. |           |                |       |       |       |       |       |       |



## Closure

Groundwater samples collected from SB-12 in October 2002 contained a TPH-g concentration of 3,900 µg/L. The recent groundwater samples collected within 5 feet of, and on two sides of SB-12, indicated that groundwater concentrations have decreased in the area since the October 2002 investigation. The decrease in groundwater concentrations is largely attributed to the remedial activities performed in December 2003.

The analytical results of the soil samples collected during this investigation indicates that limited and localized impact to soil from TPH-g and TPH-d is present in the immediate vicinity of the former Fern Café. Soil sample SB-15-8.5 contained TPH-g at a concentration of 7.0 mg/Kg and TPH-d at a concentration of 130mg/Kg. The TPH-d result was footnoted by the laboratory indicating that the presence of hydrocarbons lower in molecular weight than diesel were present in the sample.

The analytical results of the groundwater samples collected during this and previous investigations suggest that localized groundwater impact is present in Main Street adjacent to the former Fern Café site and adjacent to the former fueling station site across Main Street. The analytical results from soil and groundwater samples collected from the borings SB-16 and SB-18 and previous borings SB-13 and SB-14 further suggests that the groundwater impact from the former Fern Café is relatively localized. The groundwater samples collected from borings SB-15 and SB-17 were similar in TPH-g concentrations. However, the difference in TPH-d and benzene concentrations suggest that the contamination detected in the borings may not be from the same source. The UST's at the former fueling station located across Main Street from the subject site were reportedly closed in place and boring SB-17 was drilled approximately 15 feet south of the reported location of the former pump islands.

Based on the result of the remedial activities performed at the site, the data presented herein and the lack of identified high risk groundwater receptors, we respectfully request that this site be considered for case closure and that no further action be required.

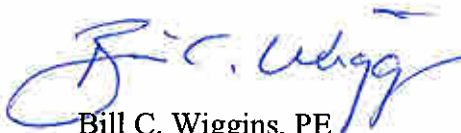
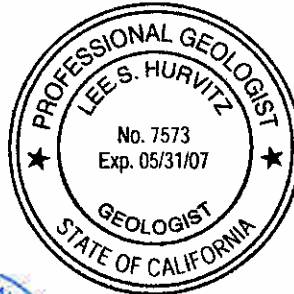


We appreciate the opportunity to be of service to you and trust that this provides the information you require at this time. If you have any questions or require any additional information, please feel free to contact us at (707) 575-8622 or [www.transtechconsultants.com](http://www.transtechconsultants.com).

Sincerely,  
TRANS TECH CONSULTANTS



Lee S. Hurvitz, PG #7573  
Senior Geologist



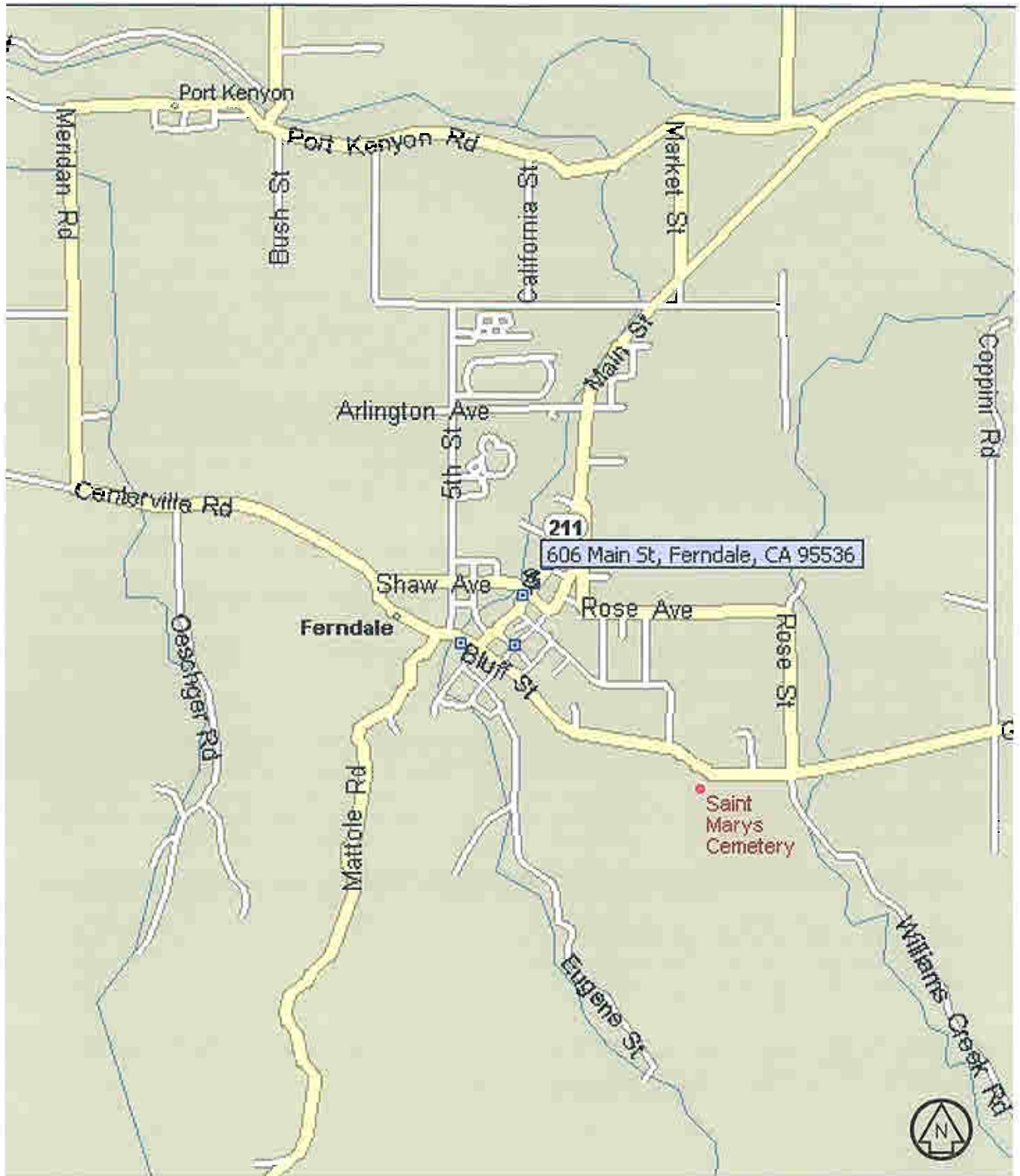
Bill C. Wiggins, PE  
Registered Civil Engineer



Attachments:

- Plate 1, Site Location Map
- Plate 2, Site Plan
- Plates A-D, Log of Borings SB-15 through SB-18
- Appendix A, Historical Groundwater Flow Direction and Gradient
- Appendix B, Historical Groundwater Analytical Data
- Appendix C, Alpha Analytical Laboratories Reports dated May 19<sup>th</sup> and 20<sup>th</sup> 2005
- Distribution List





**TRANS TECH CONSULTANTS**

930 SHILOH RD., BLDG 44, SUITE J  
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## SITE LOCATION MAP

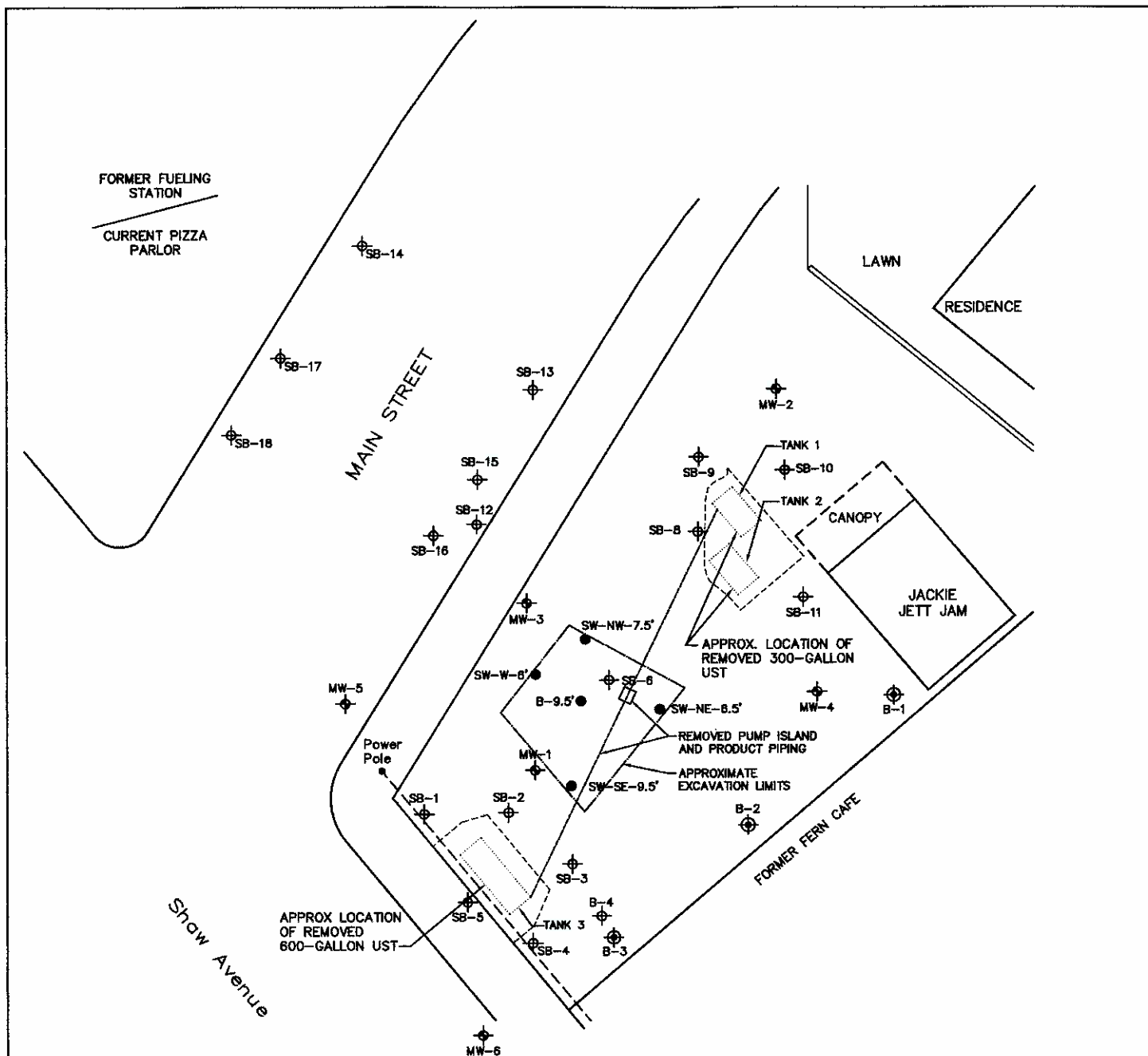
FERN CAFE  
606 MAIN STREET  
FERNDALE, CALIFORNIA

PLATE:

1

|           |                |           |             |              |            |         |
|-----------|----------------|-----------|-------------|--------------|------------|---------|
| DRAWN BY: | DWG NAME:      | APPR. BY: | JOB NUMBER: | W.O. NUMBER: | REVISIONS: | DATE:   |
| PSC       | 3057.01.03 SLM | LSH       | 3057.01.03  | A-212        |            | 8/25/03 |





# LEGEND

- HYDROPUNCH SAMPLING LOCATION
- MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- SOIL BORING LOCATION
- PREVIOUS EXCAVATION LIMITS
- NEW EXCAVATION LIMITS



0' 2' 4' 8' 16'  
1/16" = 1'



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## SITE PLAN

FORMER FERN CAFE  
606 MAIN STREET  
FERNDAL, CALIFORNIA

PLATE:

2

|                  |                         |                  |                        |                       |            |                  |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|
| DRAWN BY:<br>PSC | DWG NAME:<br>3057.01 SP | APPR. BY:<br>LSH | JOB NUMBER:<br>3057.01 | W.O. NUMBER:<br>A-755 | REVISIONS: | DATE:<br>5/23/05 |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|

Date: 5/5/05  
 Logged By: LSH  
 Drill Start Time: 10:45  
 Drill End Time: 12:15

BORING No.  
**SB-15**










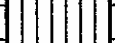



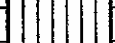

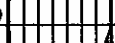
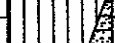




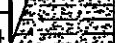


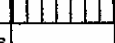
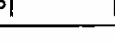
Boring Location - See Site Plan

See Unified Soil Classification System (USCS)  
 for Legend and information not noted.

Drilling Contractor: CLEARHEART  
 Driller's Name: PABLO/FRED  
 Drilling Method: 6" HOLLOW STEM  
 Sampling Method: CMSSS  
 Hammer Weight, lbs. 140

MW Installed: Y ☐ N ☒ if no, boring filled with:  
 Cement ☒ Bentonite: Cement ☐ Grout ☐ Chips ☐  
 Auger Depth, ft: 15 Total Depth, ft: 15.5  
 Hydropunch Int., ft: NA Temp Screen, ft: 10

Notes: HAND AUGER TO 5'

| Sample | Sample Condition | Inches Recovered | C = CMSSS<br>Sp = Std. Pin | Blows / 6 in. | Initial Free Water | Static Water | PID (ppm)<br>maximum, not<br>stabilized | Odor | Discolored | USCS Soil Class. | Depth in Feet | Graphic Log   | Estimated Gravel, % | Estimated Sand, % | Estimated Silt, % | Estimated Clay, % | Description:                    |
|--------|------------------|------------------|----------------------------|---------------|--------------------|--------------|---|------|------------|------------------|---------------|---|---------------------|-------------------|-------------------|-------------------|---------------------------------|
|        |                  |                  |                            |               |                    |              | NA                                      | NO   | NO         | A                |               |   |                     |                   |                   |                   | ASPHALT                         |
|        |                  |                  |                            |               |                    |              |   |      |            | B                | 1             |    |                     |                   |                   |                   | BASEROCK                        |
|        |                  |                  |                            |               |                    |              |   |      | YES        |                  | 2             |    |                     |                   |                   |                   | BLUEISH SILT/CLAY               |
|        |                  |                  |                            |               |                    |              |   |      | NO         |                  | 3             |    |                     |                   |                   |                   | BROWNISH SILT/CLAY              |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 4             |    |                     |                   |                   |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 5             |    |                     |                   |                   |                   | BROWNISH GREY MOTTLED           |
|        |                  |                  |                            |               |                    |              |   |      | YES        |                  | 6             |    |                     |                   |                   |                   | CLAYEY SILT                     |
|        |                  |                  |                            |               |                    |              |   |      |            | ML               | 7             |    | 15                  | 60                | 25                |                   | BLUEISH GREY CLAYEY SILT, MOIST |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 8             |   | 15                  | 60                | 25                |                   | TO WET, MED STIFF, SOME SAND    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 9             |  | 15                  | 60                | 25                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 10            |  | 35                  | 50                | 15                |                   | SAND INCREASES                  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 11            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 12            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 13            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 14            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 15            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 16            |  | 35                  | 50                | 15                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            | ML               | 17            |  | 40                  | 50                | 10                |                   | BROWN MOTTLED SANDY SILT WITH   |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 18            |  | 40                  | 50                | 10                |                   | SOME CLAY, WET, MED STIFF       |
|        |                  |                  |                            |               |                    |              |   |      |            | ML               | 19            |  | 40                  | 50                | 10                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 20            |  | 40                  | 50                | 10                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 21            |  | 40                  | 50                | 10                |                   | BROWNISH MOTTLED SANDY SILT     |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 22            |  | 40                  | 50                | 10                |                   | WET, SOFT                       |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 23            |  | 40                  | 50                | 10                |                   |                                 |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 24            |  | 20                  | 60                | 20                |                   | BROWNISH CLAYEY SILT WITH       |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 25            |  | 20                  | 60                | 20                |                   | SAND, MOIST TO WET MED STIFF    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 26            |  | 20                  | 60                | 20                |                   |                                 |



**TRANS TECH CONSULTANTS**

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## BORING LOG SB-15

FERN CAFE  
 606 MAIN STREET  
 FERNDALE, CALIFORNIA

PLATE:  
**A-1**

|                  |                         |                  |                        |                       |            |                  |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|
| DRAWN BY:<br>JLP | DWG NAME:<br>3057.01 BL | APPR. BY:<br>LSH | JOB NUMBER:<br>3057.01 | W.O. NUMBER:<br>A-755 | REVISIONS: | DATE:<br>5/23/05 |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|

Date: 5/05/05  
 Logged By: BRH  
 Drill Start Time: 12:30  
 Drill End Time: 1:30

BORING No.  
**SB-16**

Boring Location - See Site Plan

See Unified Soil Classification System (USCS)  
 for Legend and information not noted.

Drilling Contractor: CLEARHEART  
 Driller's Name: PABLO/FRED  
 Drilling Method: 6" AUGER HOLLOW STEM  
 Sampling Method: CMSSS  
 Hammer Weight, lbs. 140

MW Installed: Y ☐ N ☒ if no, boring filled with:  
 Cement ☒ Bentonite: Cement ☐ Grout ☐ Chips ☐  
 Auger Depth, ft: 15 Total Depth, ft: 15  
 Hydropunch Int., ft: NA Temp Screen, ft: 10

Notes: HAND AUGER FIRST 5 FEET

| Sample | Sample Condition | Inches Recovered | C = CMSSS<br>SP = Std. Pin | Blows / 6 in. | Initial Free Water | Static Water | PID (ppm)<br>maximum, not<br>stabilized | Odor | Discolored | USCS Soil Class. | Depth in Feet | Graphic Log | Estimated Gravel, % | Estimated Sand, % | Estimated Silt, % | Estimated Clay, % | Description:   |
|--------|------------------|------------------|----------------------------|---------------|--------------------|--------------|---|------|------------|------------------|---------------|-------------|---------------------|-------------------|-------------------|-------------------|--|
|        |                  |                  |                            |               |                    |              |   |      |            |                  |               |             |                     |                   |                   |                   | Soil Type (USCS);<br>Color;<br>Moisture Condition (dry, moist, wet);<br>Relative Density - sand & gravel (v. loose,<br>loose, m. dense, dense, v. dense);<br>Consistency - silt & clay (v. soft, soft,<br>m. stiff, stiff, v. stiff, hard) |
|        |                  |                  |                            |               |                    |              | NA                                      | No   | No         |                  | 1             |             |                     |                   |                   |                   | ASPHALT/ROADBASE   |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 2             |             |                     |                   |                   |                   | GREY/BROWN, MOTTLED, CLAYEY SILT,<br>MOIST   |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 3             |             |                     |                   |                   |                   | (V. FAINT ODOR)  |
|        |                  |                  |                            |               |                    |              |   |      | YES        |                  | 4             |             |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 5             |             |                     |                   |                   |                   |  |
| X      | G                | 6                |                            | 2             |                    |              |   |      |            |                  | 6             |             |                     | 60                | 40                |                   | DARK GREY, CLAYEY SILT, MOIST,<br>MED. STIFF   |
| X      |                  | 6                | C                          | 2             |                    |              |   |      |            |                  | 7             |             |                     | 60                | 40                |                   |  |
| X      |                  | 6                |                            | 2             |                    |              |   |      |            |                  | 8             |             |                     | 60                | 40                |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            | ML               | 9             |             |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 10            |             |                     |                   |                   |                   |  |
| X      | G                | 6                |                            | 2             |                    |              |   |      |            |                  | 11            |             | 10                  | 50                | 40                |                   | GREY, CLAYEY SILT, WET MEDIUM STIFF  |
| X      |                  | 6                | C                          | 2             |                    |              |   |      |            |                  | 12            |             | 30                  | 50                | 20                |                   | GRADES TO SANDY SILT   |
| X      |                  | 6                |                            | 2             |                    |              |   |      |            |                  | 13            |             | 30                  | 50                | 20                |                   | (V. FINE SAND)   |
|        |                  |                  |                            |               |                    |              |   |      |            | ML<br>SM         | 14            |             |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 15            |             |                     |                   |                   |                   |  |
| X      | G                | 6                |                            | 2             |                    |              |   |      |            |                  | 16            |             | 30                  | 50                | 20                |                   | GREY, SANDY SILT, WET MED STIFF  |
| X      |                  | 6                | C                          | 2             |                    |              |   |      |            |                  |               |             | 30                  | 50                | 20                |                   | MOTTLED GREY BROWN @ 15 FEET   |
| X      |                  | 6                |                            | 2             |                    |              |   |      |            |                  |               |             | 30                  | 50                | 20                |                   |  |



930 SHILOH RD., BLDG 44, SUITE J  
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## BORING LOG SB-16

FERN CAFE  
 606 MAIN STREET  
 FERNDALE, CALIFORNIA

PLATE:  
**B-1**

|               |                      |               |                     |                    |            |               |
|---------------|----------------------|---------------|---------------------|--------------------|------------|---------------|
| DRAWN BY: JLP | DWG NAME: 3057.01 BL | APPR. BY: LSH | JOB NUMBER: 3057.01 | W.O. NUMBER: A-755 | REVISIONS: | DATE: 5/23/05 |
|---------------|----------------------|---------------|---------------------|--------------------|------------|---------------|

Date: 5/05/05  
 Logged By: LSH  
 Drill Start Time: 3:15  
 Drill End Time: 4:30

BORING No.  
**SB-17**

















Boring Location - See Site Plan

See Unified Soil Classification System (USCS)  
 for Legend and information not noted.

Drilling Contractor: CLEARHEART  
 Driller's Name: PABLO/FRED  
 Drilling Method: 6" HOLLOW STEM  
 Sampling Method: CMSSS  
 Hammer Weight, lbs. 140

MW Installed: Y ☐ N ☒ if no, boring filled with:  
 Cement ☐ Bentonite: Cement ☐ Grout ☐ Chips ☒  
 Auger Depth, ft: 15 Total Depth, ft: 15  
 Hydropunch Int., ft: NA Temp Screen, ft: 10'

Notes: HAND AUGER TO 5'

| Sample | Sample Condition | Inches Recovered | C = CMSSS<br>SP = Std. Pin | Blows / 6 in. | Initial Free Water | Static Water | PID (ppm)<br>maximum, not<br>stabilized | Odor | Discolored | USCS Soil Class. | Depth in Feet | Graphic Log   | Estimated Gravel, % | Estimated Sand, % | Estimated Silt, % | Estimated Clay, % | Description:                                     |
|--------|------------------|------------------|----------------------------|---------------|--------------------|--------------|---|------|------------|------------------|---------------|---|---------------------|-------------------|-------------------|-------------------|--|
|        |                  |                  |                            |               |                    |              | NA                                      | No   | YES        | A<br>B           | 1             |    |                     |                   |                   |                   | ASPHALT  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 2             |    |                     |                   |                   |                   | BASEROCK   |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 3             |    |                     |                   |                   |                   | GREY SANDY CLAYEY SILT                           |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 4             |    |                     |                   |                   |                   | MOIST  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 5             |    | 15                  | 50                | 35                |                   | GREYISH CLAYEY SILT W/<br>SOME SAND, MOIST, SOFT |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 6             |    | 15                  | 50                | 35                |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 7             |   |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 8             |  |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 9             |  |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 10            |  | 35                  | 50                | 15                |                   | GREYISH SANDY SILT W/ SOME<br>CLAY, WET, SOFT    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 11            |  | 35                  | 50                | 15                |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 12            |  |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 13            |  |                     |                   |                   |                   |  |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 14            |  | 25                  | 50                | 25                |                   | BROWNISH SANDY CLAYEY SILT                       |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 15            |  | 25                  | 50                | 25                |                   | MOIST TO WET, MED STIFF                          |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 16            |  |                     |                   |                   |                   |  |



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## BORING LOG SB-17

FERN CAFE  
 606 MAIN STREET  
 FERNDALE, CALIFORNIA

PLATE:  
**C-1**

|                  |                         |                  |                        |                       |            |                  |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|
| DRAWN BY:<br>JLP | DWG NAME:<br>3057.01 BL | APPR. BY:<br>LSH | JOB NUMBER:<br>3057.01 | W.O. NUMBER:<br>A-755 | REVISIONS: | DATE:<br>5/23/05 |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|

Date: 5/05/05  
Logged By: LSH  
Drill Start Time: 4:50  
Drill End Time: 5:45

BORING No.  
**SB-18**











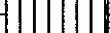





Boring Location - See Site Plan

See Unified Soil Classification System (USCS)  
for Legend and Information not noted.

Drilling Contractor: CLEARHEART  
Driller's Name: PABLO/FRED  
Drilling Method: 6" HOLLOW STEM AUGERS  
Sampling Method: CMSSS  
Hammer Weight, lbs. 140

MW Installed: Y ☐ N ☒ if no, boring filled with:  
Cement ☐ Bentonite: Cement ☐ Grout ☐ Chips ☒  
Auger Depth, ft: 15 Total Depth, ft: 15  
Hydropunch Int., ft: NA Temp Screen, ft: 10

Notes: HAND AUGER TO 5'

| Sample | Sample Condition | Inches Recovered | C = CMSSS<br>Sp = Std. Pin | Blows / 6 in. | Initial Free Water | Static Water | PID (ppm)<br>maximum, not<br>stabilized | Odor | Discolored | USCS Soil Class. | Depth in Feet | Graphic Log   | Estimated Gravel, % | Estimated Sand, % | Estimated Silt, % | Estimated Clay, % | Description:                       |
|--------|------------------|------------------|----------------------------|---------------|--------------------|--------------|---|------|------------|------------------|---------------|---|---------------------|-------------------|-------------------|-------------------|------------------------------------|
|        |                  |                  |                            |               |                    |              | NA                                      | No   | No         | A                |               |   |                     |                   |                   |                   | ASPHALT                            |
|        |                  |                  |                            |               |                    |              |   |      |            | B                | 1             |    |                     |                   |                   |                   | BASEROCK                           |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 2             |    |                     |                   |                   |                   |                                    |
|        |                  |                  |                            |               |                    |              |   | YES  | YES        |                  | 3             |    |                     |                   |                   |                   |                                    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 4             |    |                     |                   |                   |                   |                                    |
|        |                  |                  |                            |               |                    |              |   |      |            | ML               | 5             |    |                     |                   |                   |                   |                                    |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 6             |    | 10                  | 60                | 30                |                   | BLUEISH GREY SILT, MOIST           |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 7             |    | 10                  | 60                | 30                |                   | SOFT                               |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 8             |   | 10                  | 60                | 30                |                   |                                    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 9             |  |                     |                   |                   |                   |                                    |
| X      | G                | 6                | C                          | 2             |                    |              |   | No   | No         |                  | 10            |  | 20                  | 50                | 30                |                   | BROWNISH CLAYEY SILT, MOIST TO WET |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 11            |  | 20                  | 50                | 30                |                   | MED STIFF                          |
|        |                  |                  |                            | 3             |                    |              |   |      |            | ML               | 12            |  | 20                  | 50                | 30                |                   |                                    |
|        |                  |                  |                            |               |                    |              |   |      |            |                  | 13            |  |                     |                   |                   |                   |                                    |
| X      | G                | 2                | C                          | 2             |                    |              |   |      |            |                  | 14            |  | 30                  | 50                | 20                |                   | BROWNISH SANDY SILT WITH           |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 15            |  | 30                  | 50                | 20                |                   | CLAY, MOIST TO WET, SOFT           |
| X      | G                | 6                | C                          | 2             |                    |              |   |      |            |                  | 16            |  | 30                  | 50                | 20                |                   |                                    |



**TRANS TECH CONSULTANTS**

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## BORING LOG SB-18

FERN CAFE  
606 MAIN STREET  
FERNDAL, CALIFORNIA

PLATE:  
**D-1**

|                  |                         |                  |                        |                       |            |                  |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|
| DRAWN BY:<br>JLP | DWG NAME:<br>3057.01 BL | APPR. BY:<br>LSH | JOB NUMBER:<br>3057.01 | W.O. NUMBER:<br>A-755 | REVISIONS: | DATE:<br>5/09/05 |
|------------------|-------------------------|------------------|------------------------|-----------------------|------------|------------------|



## APPENDIX A

### Appendix A - Historical Groundwater Flow Direction and Gradient

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 8/24/95     | MW-1    | 50.92         | 7.21              | 43.71                 | N18°E<br>i = 0.022                  |
|             | MW-2    | 50.79         | 8.13              | 42.66                 |                                     |
|             | MW-3    | 51.00         | 7.71              | 43.29                 |                                     |
| 9/25/95     | MW-1    | 50.92         | 6.22              | 44.70                 | North<br>i = 0.065                  |
|             | MW-2    | 50.79         | 8.75              | 42.04                 |                                     |
|             | MW-3    | 51.00         | 7.60              | 43.40                 |                                     |
| 10/24/95    | MW-1    | 50.92         | 6.77              | 44.15                 | N13°W<br>i = 0.034                  |
|             | MW-2    | 50.79         | 7.80              | 42.99                 |                                     |
|             | MW-3    | 51.00         | 7.53              | 43.47                 |                                     |
| 12/04/95    | MW-1    | 50.92         | 6.10              | 44.82                 | N 10°W<br>i = 0.011                 |
|             | MW-2    | 50.79         | 6.38              | 44.41                 |                                     |
|             | MW-3    | 51.00         | 6.41              | 44.59                 |                                     |
| 12/21/95    | MW-1    | 50.92         | 4.12              | 46.80                 | S 59°E<br>i = 0.018                 |
|             | MW-2    | 50.79         | 4.01              | 46.78                 |                                     |
|             | MW-3    | 51.00         | 4.00              | 47.00                 |                                     |
| 01/26/96    | MW-1    | 50.92         | 5.23              | 45.69                 | S 62°E<br>i = 0.008                 |
|             | MW-2    | 50.79         | 5.13              | 45.66                 |                                     |
|             | MW-3    | 51.00         | 5.23              | 45.77                 |                                     |
| 02/26/96    | MW-1    | 50.92         | 5.33              | 45.59                 | N 68°E<br>i = 0.008                 |
|             | MW-2    | 50.79         | 5.51              | 45.28                 |                                     |
|             | MW-3    | 51.00         | 5.46              | 45.54                 |                                     |
| 03/25/96    | MW-1    | 50.92         | 6.10              | 44.82                 | N 89°E<br>i = 0.047                 |
|             | MW-2    | 50.79         | 7.21              | 43.58                 |                                     |
|             | MW-3    | 51.00         | 6.13              | 44.87                 |                                     |
| 04/21/96    | MW-1    | 50.92         | 5.68              | 45.24                 | S 59°E<br>i = 0.032                 |
|             | MW-2    | 50.79         | 5.51              | 45.28                 |                                     |
|             | MW-3    | 51.00         | 6.12              | 44.88                 |                                     |



**Appendix A Continued - Historical Groundwater Flow Direction and Gradient**

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 05/28/96    | MW-1    | 50.92         | 6.52              | 44.40                 | N 42°W<br>i = 0.045                 |
|             | MW-2    | 50.79         | 6.98              | 43.81                 |                                     |
|             | MW-3    | 51.00         | 7.31              | 43.69                 |                                     |
| 07/10/96    | MW-1    | 50.92         | 5.92              | 45.00                 | S 72°E<br>i = 0.014                 |
|             | MW-2    | 50.79         | 5.96              | 44.83                 |                                     |
|             | MW-3    | 51.00         | 5.90              | 45.10                 |                                     |
| 07/17/96    | MW-1    | 50.92         | 5.88              | 45.04                 | S 64°E<br>i = 0.028                 |
|             | MW-2    | 50.79         | 5.89              | 44.90                 |                                     |
|             | MW-3    | 51.00         | 5.68              | 45.32                 |                                     |
| 07/08/98    | MW-1    | 50.92         | 6.24              | 44.68                 | N69°E<br>i = 0.015                  |
|             | MW-2    | 50.79         | 6.71              | 44.08                 |                                     |
|             | MW-3    | 51.00         | 6.41              | 44.59                 |                                     |
| 9/29/98     | MW-1    | 50.92         | 6.88              | 44.04                 | N23°E<br>i=0.019                    |
|             | MW-2    | 50.79         | 7.65              | 43.14                 |                                     |
|             | MW-3    | 51.00         | 7.30              | 43.70                 |                                     |
|             | MW-4    | 50.66         | 7.00              | 43.66                 |                                     |
| 12/30/99    | MW-1    | 50.92         | 6.40              | 44.52                 | N8°E<br>i = 0.014                   |
|             | MW-2    | 50.79         | 6.90              | 43.89                 |                                     |
|             | MW-3    | 51.00         | 6.78              | 44.24                 |                                     |
|             | MW-4    | 50.66         | 6.37              | 44.29                 |                                     |
| 09/07/00    | MW-1    | 50.92         | 6.40              | 44.52                 | N61°E<br>i = 0.037                  |
|             | MW-2    | 50.79         | 7.50              | 43.29                 |                                     |
|             | MW-3    | 51.00         | 6.40              | 44.60                 |                                     |
|             | MW-4    | 50.66         | 6.80              | 43.86                 |                                     |



**Appendix A Continued - Historical Groundwater Flow Direction and Gradient**

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 12/19/00    | MW-1    | 50.92         | 5.91              | 45.01                 | N35°E<br>i = 0.012                  |
|             | MW-2    | 50.79         | 6.38              | 44.41                 |                                     |
|             | MW-3    | 51.00         | 5.93              | 45.07                 |                                     |
|             | MW-4    | 50.66         | 5.51              | 45.15                 |                                     |
| 03/27/01    | MW-1    | 50.92         | 6.02              | 44.90                 | N42°E<br>i = 0.011                  |
|             | MW-2    | 50.79         | 6.41              | 44.38                 |                                     |
|             | MW-3    | 51.00         | 6.20              | 44.80                 |                                     |
|             | MW-4    | 50.66         | 6.07              | 44.59                 |                                     |
| 07/26/01    | MW-1    | 50.92         | 6.28              | 44.64                 | N 53° E<br>i = 0.011                |
|             | MW-2    | 50.79         | 7.35              | 43.44                 |                                     |
|             | MW-3    | 51.00         | 6.05              | 44.95                 |                                     |
|             | MW-4    | 50.66         | 6.35              | 44.31                 |                                     |
| 10/16/01    | MW-1    | 50.92         | 6.66              | 44.26                 | N 65° E<br>i = 0.03                 |
|             | MW-2    | 50.79         | 7.72              | 43.07                 |                                     |
|             | MW-3    | 51.00         | 6.38              | 44.62                 |                                     |
|             | MW-4    | 50.66         | 6.81              | 43.85                 |                                     |
| 01/15/02    | MW-1    | 50.92         | 5.69              | 45.23                 | N 25°E<br>i = 0.02                  |
|             | MW-2    | 50.79         | 5.91              | 44.88                 |                                     |
|             | MW-3    | 51.00         | 6.18              | 44.82                 |                                     |
|             | MW-4    | 50.66         | 5.76              | 44.90                 |                                     |



**Appendix A Continued - Historical Groundwater Flow Direction and Gradient**

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 04/23/02    | MW-1    | 50.92         | 6.22              | 44.70                 | N 25°E<br>i = 0.01                  |
|             | MW-2    | 50.79         | 6.78              | 44.01                 |                                     |
|             | MW-3    | 51.00         | 6.41              | 44.59                 |                                     |
|             | MW-4    | 50.66         | 6.21              | 44.45                 |                                     |
| 07/23/02    | MW-1    | 50.92         | 6.67              | 44.25                 | N 30°E<br>i = 0.01                  |
|             | MW-2    | 50.79         | 7.89              | 42.90                 |                                     |
|             | MW-3    | 51.00         | 7.04              | 43.96                 |                                     |
|             | MW-4    | 50.66         | 6.82              | 43.84                 |                                     |
| 12/02/02    | MW-1    | 50.92         | 7.40              | 43.52                 | N 25°E<br>i = 0.03                  |
|             | MW-2    | 50.79         | 7.81              | 42.98                 |                                     |
|             | MW-3    | 51.00         | 6.93              | 44.07                 |                                     |
|             | MW-4    | 50.66         | 6.74              | 43.92                 |                                     |
|             | MW-5    | 51.08         | 6.68              | 44.40                 |                                     |
|             | MW-6    | 50.75         | 6.04              | 44.71                 |                                     |
| 03/37/03    | MW-1    | 50.92         | 4.98              | 45.94                 | N 55°W<br>i = 0.03                  |
|             | MW-2    | 50.79         | 5.40              | 45.39                 |                                     |
|             | MW-3    | 51.00         | 5.03              | 45.97                 |                                     |
|             | MW-4    | 50.66         | 4.58              | 46.08                 |                                     |
|             | MW-5    | 51.08         | 6.09              | 44.99                 |                                     |
|             | MW-6    | 50.75         | 5.15              | 45.60                 |                                     |
| 05/16/03    | MW-1    | 50.92         | 5.88              | 45.04                 | N 10°E<br>i = 0.03                  |
|             | MW-2    | 50.79         | 7.11              | 43.68                 |                                     |
|             | MW-3    | 51.00         | 6.29              | 44.71                 |                                     |
|             | MW-4    | 50.66         | 6.11              | 44.55                 |                                     |
|             | MW-5    | 51.08         | 6.56              | 44.52                 |                                     |
|             | MW-6    | 50.75         | 5.66              | 45.09                 |                                     |





**Appendix A Continued - Historical Groundwater Flow Direction and Gradient**

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 09/12/03    | MW-1    | 50.92         | 6.87              | 44.05                 | N 20°E<br>i = 0.03                  |
|             | MW-2    | 50.79         | 7.88              | 42.91                 |                                     |
|             | MW-3    | 51.00         | 7.02              | 43.98                 |                                     |
|             | MW-4    | 50.66         | 6.70              | 43.96                 |                                     |
|             | MW-5    | 51.08         | 6.88              | 44.20                 |                                     |
|             | MW-6    | 50.75         | 6.16              | 44.59                 |                                     |
| 03/04/04    | MW-1    | 50.92         | 5.69              | 45.23                 | N10°E<br>i = 0.02                   |
|             | MW-2    | 50.79         | 6.49              | 44.30                 |                                     |
|             | MW-3    | 51.00         | 6.00              | 45.00                 |                                     |
|             | MW-4    | 50.66         | 5.60              | 45.06                 |                                     |
|             | MW-5    | 51.08         | 6.02              | 45.06                 |                                     |
|             | MW-6    | 50.75         | 5.40              | 45.35                 |                                     |
| 07/02/04    | MW-1    | 50.92         | 6.85              | 44.07                 | N10°E<br>i = 0.02                   |
|             | MW-2    | 50.79         | 7.85              | 42.94                 |                                     |
|             | MW-3    | 51.00         | 7.26              | 43.74                 |                                     |
|             | MW-4    | 50.66         | 6.90              | 43.76                 |                                     |
|             | MW-5    | 51.08         | 7.03              | 44.05                 |                                     |
|             | MW-6    | 50.75         | 6.00              | 44.75                 |                                     |
| 10/29/04    | MW-1    | 50.92         | 6.02              | 44.90                 | N13°W<br>i = 0.03                   |
|             | MW-2    | 50.79         | 6.85              | 43.94                 |                                     |
|             | MW-3    | 51.00         | 6.73              | 44.27                 |                                     |
|             | MW-4    | 50.66         | 5.83              | 44.83                 |                                     |
|             | MW-5    | 51.08         | 6.70              | 44.38                 |                                     |
|             | MW-6    | 50.75         | 5.52              | 45.23                 |                                     |



**Appendix A Continued - Historical Groundwater Flow Direction and Gradient**

| Sample Date | Well ID | TOC Elevation | Water Level Depth | Water Level Elevation | Groundwater Flow Direction/Gradient |
|-------------|---------|---------------|-------------------|-----------------------|-------------------------------------|
| 03/16/05    | MW-1    | 50.92         | 6.42              | 44.50                 | Northerly<br>i = 0.03               |
|             | MW-2    | 50.79         | 7.40              | 43.39                 |                                     |
|             | MW-3    | 51.00         | 7.16              | 43.84                 |                                     |
|             | MW-4    | 50.66         | 6.40              | 44.26                 |                                     |
|             | MW-5    | 51.08         | 6.65              | 44.43                 |                                     |
|             | MW-6    | 50.75         | 5.80              | 44.95                 |                                     |



## APPENDIX B

### Appendix B - Historical Groundwater Analytical Data

| Sample Date  | Well ID | TPH-g          | B    | T    | E   | X   | Lead |
|--|---------|----------------|------|------|-----|-----|------|
|  |         | -----µg/L----- |      |      |     |     |      |
| 05/20/95   | MW-1    | 240            | 1.9  | ND   | 1.5 | 2.5 | ND   |
|  | MW-2    | 250            | 6.7  | 0.64 | 2.4 | 1.6 | 6.54 |
|  | MW-3    | ND             | ND   | ND   | ND  | ND  | 12.4 |
| 08/24/95   | MW-1    | ND             | 0.62 | ND   | ND  | ND  | 24.2 |
|  | MW-2    | ND             | ND   | ND   | ND  | ND  | 13.4 |
|  | MW-3    | 130            | 5.7  | 0.77 | 1.0 | ND  | 5.92 |
| 12/04/95   | MW-1    | 290            | 14   | 1.5  | 2.2 | 1.6 | 22   |
|  | MW-2    | ND             | ND   | ND   | ND  | ND  | 4    |
|  | MW-3    | 280            | 11   | 1.4  | 4.5 | 1.0 | 8    |
| 02/26/96   | MW-1    | 290            | 11   | 1.6  | 2.9 | 2.0 | 46   |
|  | MW-2    | ND             | ND   | ND   | ND  | ND  | 11   |
|  | MW-3    | 260            | 12   | 1.6  | 3.6 | 1.2 | 6    |
| 05/28/96   | MW-1    | 360            | 17   | 1.3  | 1.9 | 1.7 | NA   |
|  | MW-2    | ND             | ND   | ND   | ND  | ND  | NA   |
|  | MW-3    | 230            | 10   | ND   | 2.4 | ND  | NA   |
| 07/08/98   | MW-1    | ND             | NA   | 0.50 | 1.0 | ND  | ND   |
|  | MW-2    | ND             | NA   | ND   | ND  | ND  | ND   |
|  | MW-3    | 120            | NA   | 2.4  | 1.1 | ND  | ND   |
| ND = Not detected at or above laboratory reporting limits.<br>NA = Not analyzed. |         |                |      |      |     |     |      |



**Appendix B Continued - Historical Groundwater Analytical Data**

| Sample Date | Well ID | TPH-g          | TPH-d | B    | T    | E    | X   | MTBE | Total Lead |
|-------------|---------|----------------|-------|------|------|------|-----|------|------------|
|             |         | -----µg/L----- |       |      |      |      |     |      | mg/L       |
| 09/29/98    | MW-1    | 84             | NA    | 0.82 | 0.75 | 0.50 | 2.5 | ND   | ND         |
|             | MW-2    | ND             | NA    | ND   | ND   | ND   | ND  | ND   | ND         |
|             | MW-3    | 74             | NA    | 0.64 | 0.74 | ND   | 1.6 | ND   | ND         |
|             | MW-4    | ND             | NA    | ND   | ND   | ND   | ND  | ND   | ND         |
| 03/01/99    | MW-1    | 60             | ND    | 1.5  | 0.72 | 0.73 | 2.1 | NA   | NA         |
|             | MW-2    | ND             | ND    | ND   | ND   | ND   | ND  | NA   | NA         |
|             | MW-3    | 430            | ND    | 9.4  | 2.1  | 2.3  | 4.4 | NA   | NA         |
|             | MW-4    | ND             | ND    | ND   | ND   | ND   | ND  | NA   | NA         |
| 12/30/99    | MW-1    | 130            | ND    | ND   | 2.3  | 2.6  | 2.1 | <100 | NA         |
|             | MW-2    | ND             | ND    | ND   | ND   | ND   | ND  | <100 | NA         |
|             | MW-3    | 810            | 180*  | 7.1  | 3.1  | 3.1  | 7.0 | <100 | NA         |
|             | MW-4    | ND             | ND    | ND   | ND   | ND   | ND  | <100 | NA         |
| 09/07/00    | MW-1    | 58             | ND    | ND   | ND   | ND   | 2.3 | <25  | NA         |
|             | MW-2    | ND             | ND    | ND   | ND   | ND   | ND  | <25  | NA         |
|             | MW-3    | 1,200          | 440*  | 16   | 3.8  | 4.0  | 10  | <50  | NA         |
|             | MW-4    | ND             | ND    | ND   | ND   | ND   | ND  | <25  | NA         |
| 12/19/00    | MW-1    | ND             | ND    | ND   | ND   | ND   | ND  | <50  | NA         |
|             | MW-2    | ND             | ND    | ND   | ND   | ND   | ND  | <50  | NA         |
|             | MW-3    | 700            | 230*  | 7.8  | 1.1  | 1.3  | 4.0 | <50  | NA         |
|             | MW-4    | ND             | ND    | ND   | ND   | ND   | ND  | <50  | NA         |
| 03/27/01    | MW-1    | 96             | ND    | ND   | ND   | ND   | ND  | <25  | NA         |
|             | MW-2    | ND             | ND    | ND   | ND   | ND   | ND  | <25  | NA         |
|             | MW-3    | 860            | 180*  | 13   | 1.3  | 2.5  | 7.2 | <25  | NA         |
|             | MW-4    | ND             | ND    | ND   | ND   | ND   | ND  | <25  | NA         |





**Appendix B Continued - Historical Groundwater Analytical Data**

| Sample Date | Well ID | TPH-g          | TPH-d | B     | T     | E     | X     | MTBE    | Total Lead |
|-------------|---------|----------------|-------|-------|-------|-------|-------|---------|------------|
|             |         | -----µg/L----- |       |       |       |       |       |         | mg/L       |
| 07/26/01    | MW-1    | <50            | <50   | 0.74  | <1.0  | <1.0  | <1.0  | <1.0    | NA         |
|             | MW-2    | <50            | <50   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0    | NA         |
|             | MW-3    | 520            | <50   | 3.5   | 4.0   | 2.3   | 4.8   | <1.0    | NA         |
|             | MW-4    | <50            | <50   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0    | NA         |
| 10/16/01    | MW-1    | <50            | <50   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  | NA         |
|             | MW-2    | <50            | <50   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  | NA         |
|             | MW-3    | 330            | 98*   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  | NA         |
|             | MW-4    | <50            | <50   | <1.0  | <1.0  | <1.0  | <1.0  | <1.0**  | NA         |
| 01/15/02    | MW-1    | <50            | <50   | <0.3  | <0.3  | <0.5  | <0.5  | <0.5**  | NA         |
|             | MW-2    | <50            | <50   | <0.3  | <0.3  | <0.5  | <0.5  | <0.5**  | NA         |
|             | MW-3    | 190            | 50    | 1.0   | <0.3  | <0.5  | <0.5  | <0.5**  | NA         |
|             | MW-4    | <50            | <50   | 0.57  | <0.3  | <0.5  | <0.5  | <0.5**  | NA         |
| 04/23/02    | MW-1    | <50            | <50   | <0.5  | <0.5  | <0.5  | <0.5  | <0.5*** | NA         |
|             | MW-2    | <50            | <50   | <0.5  | <0.5  | <0.5  | <0.5  | <0.5*** | NA         |
|             | MW-3    | 210            | 53    | 0.90  | <0.5  | <0.5  | 0.55  | <0.5*** | NA         |
|             | MW-4    | <50            | <50   | <0.5  | <0.5  | <0.5  | <0.5  | <0.5*** | NA         |
| 07/23/02    | MW-1    | <50            | <50   | 0.57  | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-2    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-3    | 250            | <50   | 1.8   | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-4    | <50            | <50   | 0.75  | <0.30 | <0.50 | <0.50 | <0.50** | NA         |



**Appendix B Continued - Historical Groundwater Analytical Data**

| Sample Date | Well ID | TPH-g          | TPH-d     | B           | T     | E     | X     | MTBE    | Total Lead |
|-------------|---------|----------------|-----------|-------------|-------|-------|-------|---------|------------|
|             |         | -----µg/L----- |           |             |       |       |       |         | mg/L       |
| 12/04/02    | MW-1    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-2    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-3    | <b>210</b>     | <b>86</b> | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-4    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-5    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
|             | MW-6    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50** | NA         |
| 03/27/03    | MW-1    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-2    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-3    | <b>160</b>     | <50       | <b>1.0</b>  | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-4    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-5    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-6    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
| 05/16/03    | MW-1    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-2    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-3    | <b>100</b>     | <50       | <b>0.99</b> | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-4    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-5    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |
|             | MW-6    | <50            | <50       | <0.30       | <0.30 | <0.50 | <0.50 | <0.50*  | NA         |



**Appendix B Continued - Historical Groundwater Analytical Data**

| Sample Date | Well ID | TPH-g          | TPH-d | B     | T     | E     | X     | MTBE  | Total Lead |
|-------------|---------|----------------|-------|-------|-------|-------|-------|-------|------------|
|             |         | -----µg/L----- |       |       |       |       |       |       | mg/L       |
| 09/12/03    | MW-1    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-2    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-3    | 250            | <50   | 0.32  | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-4    | <50            | 70    | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-5    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-6    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
| 03/04/04    | MW-1    | <50            | 140   | 0.36  | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-2    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-3    | 130            | 240   | 1.0   | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-4    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-5    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-6    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
| 7/02/04     | MW-1    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-2    | NA             | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-3    | 120            | <50   | <3.0  | <3.0  | <5.0  | <5.0  | <5.0  | NA         |
|             | MW-4    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-5    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|             | MW-6    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |



**Appendix B Continued - Historical Groundwater Analytical Data**

| Sample Date   | Well ID | TPH-g          | TPH-d | B     | T     | E     | X     | MTBE  | Total Lead |
|---|---------|----------------|-------|-------|-------|-------|-------|-------|------------|
|   |         | -----µg/L----- |       |       |       |       |       |       | mg/L       |
| 10/29/04  | MW-1    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|   | MW-2    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-3    | 130            | <50   | 0.60  | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|   | MW-4    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-5    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-6    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
| 03/16/05  | MW-1    | <50            | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|   | MW-2    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-3    | 51             | <50   | <0.30 | <0.30 | <0.50 | <0.50 | <0.50 | NA         |
|   | MW-4    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-5    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
|   | MW-6    | NA             | NA    | NA    | NA    | NA    | NA    | NA    | NA         |
| ND = Results are below laboratory reporting limits<br>NA = Not Analyzed<br>* = Higher boiling point components of gasoline are present<br>** = Also ND for additional fuel oxygenates and lead scavengers.<br>*** = See laboratory report for additional oxygenates detected. |         |                |       |       |       |       |       |       |            |



## APPENDIX C



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

20 May 2005

Trans Tech Consultants

Attn: Bill Wiggins

930 Shiloh Rd., Bldg.44, Suite J

Windsor, CA 95492

RE: Fern Cafe

Work Order: A505227

Enclosed are the results of analyses for samples received by the laboratory on 05/06/05 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa E. Jansen For Sheri L. Speaks  
Project Manager





Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 1 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID   | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-------------|---------------|--------|----------------|----------------|
| SB-15-8.5'  | A505227-01    | Soil   | 05/05/05 11:35 | 05/06/05 12:00 |
| SB-16-10.5' | A505227-02    | Soil   | 05/05/05 12:55 | 05/06/05 12:00 |
| SB-17-10'   | A505227-03    | Soil   | 05/05/05 16:05 | 05/06/05 12:00 |
| SB-18-10'   | A505227-04    | Soil   | 05/05/05 17:40 | 05/06/05 12:00 |
| SB-15       | A505227-05    | Water  | 05/05/05 17:40 | 05/06/05 12:00 |
| SB-16       | A505227-06    | Water  | 05/05/05 14:30 | 05/06/05 12:00 |
| SB-17       | A505227-07    | Water  | 05/05/05 17:45 | 05/06/05 12:00 |
| SB-18       | A505227-08    | Water  | 05/05/05 18:15 | 05/06/05 12:00 |

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



Alpha Analytical Laboratories Inc.

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CHEMICAL EXAMINATION REPORT

Page 2 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD    | BATCH   | PREPARED          | ANALYZED | DILUTION | RESULT                  | PQL    | NOTE  |
|--|-----------|---------|-------------------|----------|----------|-------------------------|--------|-------|
| SB-15-8.5' (A505227-01)                              |           |         |                   |          |          |                         |        |       |
|  |           |         | Sample Type: Soil |          |          | Sampled: 05/05/05 11:35 |        |       |
| Metals by EPA 6000/7000 Series Methods               |           |         |                   |          |          |                         |        |       |
| Lead   | EPA 6010  | AE51202 | 05/12/05          | 05/16/05 | 1        | 10 mg/kg                | 5.0    |       |
| TPH by EPA/LUFT GC/GCMS Methods                      |           |         |                   |          |          |                         |        |       |
| TPH as Diesel  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1        | 130 mg/kg               | 1.0    | D-07  |
| TPH as Gasoline                                      | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 | "        | 7.0 "                   | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 |          | 174 %                   | 20-152 | S-02  |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 |          | 94.0 %                  | 60-156 |       |
| Volatile Organic Compounds by EPA Methods 8260B/5035 |           |         |                   |          |          |                         |        |       |
| Benzene  | EPA 8260B | AE51216 | 05/06/05          | 05/12/05 | 173.2    | ND mg/kg                | 0.17   | R-06  |
| Toluene  | "         | "       | "                 | "        | "        | ND "                    | 0.17   |       |
| Ethylbenzene   | "         | "       | "                 | "        | "        | ND "                    | 0.17   |       |
| Xylenes (total)                                      | "         | "       | "                 | "        | "        | ND "                    | 0.17   |       |
| Methyl tert-butyl ether                              | "         | "       | "                 | "        | "        | ND "                    | 0.17   |       |
| Surrogate: Bromofluorobenzene                        | "         | "       | "                 | "        |          | 111 %                   | 68-113 |       |
| Surrogate: Dibromofluoromethane                      | "         | "       | "                 | "        |          | 91.9 %                  | 40-140 |       |
| Surrogate: Toluene-d8                                | "         | "       | "                 | "        |          | 118 %                   | 61-119 |       |
| SB-16-10.5' (A505227-02)                             |           |         |                   |          |          |                         |        |       |
|  |           |         | Sample Type: Soil |          |          | Sampled: 05/05/05 12:55 |        |       |
| TPH by EPA/LUFT GC/GCMS Methods                      |           |         |                   |          |          |                         |        |       |
| TPH as Diesel  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1        | ND mg/kg                | 2.0    | QB-03 |
| TPH as Gasoline                                      | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 | "        | 1.1 "                   | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 |          | 61.7 %                  | 20-152 |       |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 |          | 88.8 %                  | 60-156 |       |

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



Alpha Analytical Laboratories Inc.

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CHEMICAL EXAMINATION REPORT

Page 3 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD    | BATCH   | PREPARED          | ANALYZED | DILUTION                | RESULT      | PQL    | NOTE  |
|--|-----------|---------|-------------------|----------|-------------------------|-------------|--------|-------|
| SB-16-10.5' (A505227-02)                             |           |         |                   |          |                         |             |        |       |
|  |           |         | Sample Type: Soil |          | Sampled: 05/05/05 12:55 |             |        |       |
| Volatile Organic Compounds by EPA Methods 8260B/5035 |           |         |                   |          |                         |             |        |       |
| Benzene  | EPA 8260B | AE51612 | 05/06/05          | 05/13/05 | 1                       | ND mg/kg    | 0.0050 |       |
| Toluene  | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Ethylbenzene   | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Xylenes (total)                                      | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Methyl tert-butyl ether                              | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Surrogate: Bromofluorobenzene                        | "         | "       | "                 | "        |                         | 101 %       | 68-113 |       |
| Surrogate: Dibromofluoromethane                      | "         | "       | "                 | "        |                         | 104 %       | 40-140 |       |
| Surrogate: Toluene-d8                                | "         | "       | "                 | "        |                         | 114 %       | 61-119 |       |
| SB-17-10' (A505227-03)                               |           |         |                   |          |                         |             |        |       |
|  |           |         | Sample Type: Soil |          | Sampled: 05/05/05 16:05 |             |        |       |
| TPH by EPA/LUFT GC/GCMS Methods                      |           |         |                   |          |                         |             |        |       |
| TPH as Diesel  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1                       | ND mg/kg    | 3.0    | QB-03 |
| TPH as Gasoline                                      | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 | "                       | 8.1 "       | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene                    | "         | "       | "                 | "        |                         | 75.0 %      | 60-156 |       |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 |                         | 64.1 %      | 20-152 |       |
| Volatile Organic Compounds by EPA Methods 8260B/5035 |           |         |                   |          |                         |             |        |       |
| Benzene  | EPA 8260B | AE51612 | 05/06/05          | 05/13/05 | 1                       | 0.016 mg/kg | 0.0050 |       |
| Toluene  | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Ethylbenzene   | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Xylenes (total)                                      | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Methyl tert-butyl ether                              | "         | "       | "                 | "        | "                       | ND "        | 0.0050 |       |
| Surrogate: Bromofluorobenzene                        | "         | "       | "                 | "        |                         | 102 %       | 68-113 |       |
| Surrogate: Dibromofluoromethane                      | "         | "       | "                 | "        |                         | 104 %       | 40-140 |       |
| Surrogate: Toluene-d8                                | "         | "       | "                 | "        |                         | 116 %       | 61-119 |       |
| SB-18-10' (A505227-04)                               |           |         |                   |          |                         |             |        |       |
|  |           |         | Sample Type: Soil |          | Sampled: 05/05/05 17:40 |             |        |       |
| TPH by EPA/LUFT GC/GCMS Methods                      |           |         |                   |          |                         |             |        |       |
| TPH as Diesel  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1                       | ND mg/kg    | 1.0    |       |
| TPH as Gasoline                                      | 8015GRO   | AE51306 | 05/06/05          | 05/17/05 | "                       | ND "        | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene                    | "         | "       | "                 | "        |                         | 91.2 %      | 60-156 |       |

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

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CHEMICAL EXAMINATION REPORT

Page 4 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

|              |                   |             |                     |
|--------------|-------------------|-------------|---------------------|
| Order Number | Receipt Date/Time | Client Code | Client PO/Reference |
| A505227      | 05/06/2005 12:00  | TRANSTEC    |                     |

Alpha Analytical Laboratories, Inc.

|  | METHOD    | BATCH   | PREPARED | ANALYZED | DILUTION                | RESULT    | PQL    | NOTE |
|--|-----------|---------|----------|----------|-------------------------|-----------|--------|------|
| SB-18-10' (A505227-04)                               |           |         |          |          |                         |           |        |      |
| Sample Type: Soil                                    |           |         |          |          | Sampled: 05/05/05 17:40 |           |        |      |
| TPH by EPA/LUFT GC/GCMS Methods (cont'd)             |           |         |          |          |                         |           |        |      |
| Surrogate: 1,4-Bromofluorobenzene                    | 8015DRO   | AE51315 | 05/13/05 | 05/13/05 |                         | 61.6 %    | 20-152 |      |
| Volatile Organic Compounds by EPA Methods 8260B/5035 |           |         |          |          |                         |           |        |      |
| Benzene  | EPA 8260B | AE51612 | 05/06/05 | 05/13/05 | 1                       | ND mg/kg  | 0.0050 |      |
| Toluene  | "         | "       | "        | "        | "                       | ND "      | 0.0050 |      |
| Ethylbenzene   | "         | "       | "        | "        | "                       | ND "      | 0.0050 |      |
| Xylenes (total)                                      | "         | "       | "        | "        | "                       | ND "      | 0.0050 |      |
| Methyl tert-butyl ether                              | "         | "       | "        | "        | "                       | ND "      | 0.0050 |      |
| Surrogate: Bromofluorobenzene                        | "         | "       | "        | "        |                         | 103 %     | 68-113 |      |
| Surrogate: Dibromofluoromethane                      | "         | "       | "        | "        |                         | 107 %     | 40-140 |      |
| Surrogate: Toluene-d8                                | "         | "       | "        | "        |                         | 122 %     | 61-119 | S-GC |
| SB-15 (A505227-05)                                   |           |         |          |          |                         |           |        |      |
| Sample Type: Water                                   |           |         |          |          | Sampled: 05/05/05 17:40 |           |        |      |
| TPH by EPA/LUFT GC/GCMS Methods                      |           |         |          |          |                         |           |        |      |
| TPH as Diesel  | 8015DRO   | AE51011 | 05/10/05 | 05/11/05 | 1                       | ND ug/l   | 50     |      |
| TPH as Gasoline                                      | 8260GRO   | AE51705 | 05/16/05 | 05/17/05 | 5                       | 1300 "    | 250    |      |
| Surrogate: Tetraetracontane                          | 8015DRO   | AE51011 | 05/10/05 | 05/11/05 |                         | 35.3 %    | 20-152 |      |
| Surrogate: Toluene-d8                                | 8260GRO   | AE51705 | 05/16/05 | 05/17/05 |                         | 102 %     | 70-129 |      |
| Volatile Organic Compounds by EPA Method 8260B       |           |         |          |          |                         |           |        |      |
| Benzene  | EPA 8260B | AE51918 | "        | 05/19/05 | 1                       | 0.81 ug/l | 0.30   |      |
| Toluene  | "         | "       | "        | "        | "                       | 0.73 "    | 0.30   |      |
| Ethylbenzene   | "         | "       | "        | "        | "                       | 0.70 "    | 0.50   |      |
| Xylenes (total)                                      | "         | "       | "        | "        | "                       | 0.75 "    | 0.50   |      |
| Methyl tert-butyl ether                              | "         | "       | "        | "        | "                       | ND "      | 0.50   |      |
| Di-isopropyl ether                                   | "         | "       | "        | "        | "                       | ND "      | 0.50   |      |
| Ethyl tert-butyl ether                               | "         | "       | "        | "        | "                       | ND "      | 0.50   |      |
| Tert-amyl methyl ether                               | "         | "       | "        | "        | "                       | ND "      | 0.50   |      |
| Tert-butyl alcohol                                   | "         | "       | "        | "        | "                       | ND "      | 10     |      |
| Surrogate: Bromofluorobenzene                        | "         | "       | "        | "        |                         | 116 %     | 45-147 |      |
| Surrogate: Dibromofluoromethane                      | "         | "       | "        | "        |                         | 91.6 %    | 85-129 |      |

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 5 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD    | BATCH   | PREPARED                  | ANALYZED | DILUTION | RESULT                         | PQL    | NOTE |
|--|-----------|---------|---------------------------|----------|----------|--------------------------------|--------|------|
| <b>SB-15 (A505227-05)</b>                                      |           |         |                           |          |          |                                |        |      |
|  |           |         | <b>Sample Type: Water</b> |          |          | <b>Sampled: 05/05/05 17:40</b> |        |      |
| <b>Volatile Organic Compounds by EPA Method 8260B (cont'd)</b> |           |         |                           |          |          |                                |        |      |
| Surrogate: Toluene-d8  | EPA 8260B | "       | "                         | 05/19/05 |          | 120 %                          | 74-137 |      |
| <b>SB-16 (A505227-06)</b>                                      |           |         |                           |          |          |                                |        |      |
|  |           |         | <b>Sample Type: Water</b> |          |          | <b>Sampled: 05/05/05 14:30</b> |        |      |
| <b>TPH by EPA/LUFT GC/GCMS Methods</b>                         |           |         |                           |          |          |                                |        |      |
| TPH as Diesel  | 8015DRO   | AE51011 | 05/10/05                  | 05/11/05 | 1        | ND ug/l                        | 50     |      |
| TPH as Gasoline  | 8260GRO   | AE51705 | 05/16/05                  | 05/17/05 | "        | ND "                           | 50     |      |
| Surrogate: Tetraetracontane                                    | 8015DRO   | AE51011 | 05/10/05                  | 05/11/05 |          | 41.6 %                         | 20-152 |      |
| Surrogate: Toluene-d8  | 8260GRO   | AE51705 | 05/16/05                  | 05/17/05 |          | 102 %                          | 70-129 |      |
| <b>Volatile Organic Compounds by EPA Method 8260B</b>          |           |         |                           |          |          |                                |        |      |
| Benzene  | EPA 8260B | AE51718 | "                         | 05/17/05 | 1        | ND ug/l                        | 0.30   |      |
| Toluene  | "         | "       | "                         | "        | "        | ND "                           | 0.30   |      |
| Ethylbenzene   | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Xylenes (total)  | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Methyl tert-butyl ether  | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Di-isopropyl ether   | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Ethyl tert-butyl ether   | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Tert-amyl methyl ether   | "         | "       | "                         | "        | "        | ND "                           | 0.50   |      |
| Tert-butyl alcohol   | "         | "       | "                         | "        | "        | ND "                           | 10     |      |
| Surrogate: Bromofluorobenzene                                  | "         | "       | "                         | "        |          | 92.4 %                         | 45-147 |      |
| Surrogate: Dibromofluoromethane                                | "         | "       | "                         | "        |          | 90.8 %                         | 85-129 |      |
| Surrogate: Toluene-d8  | "         | "       | "                         | "        |          | 102 %                          | 74-137 |      |
| <b>SB-17 (A505227-07)</b>                                      |           |         |                           |          |          |                                |        |      |
|  |           |         | <b>Sample Type: Water</b> |          |          | <b>Sampled: 05/05/05 17:45</b> |        |      |
| <b>TPH by EPA/LUFT GC/GCMS Methods</b>                         |           |         |                           |          |          |                                |        |      |
| TPH as Diesel  | 8015DRO   | AE51011 | 05/10/05                  | 05/11/05 | 1        | 110 ug/l                       | 50     | D-07 |
| TPH as Gasoline  | 8260GRO   | AE51705 | 05/16/05                  | 05/17/05 | 20       | 1200 "                         | 1000   |      |
| Surrogate: Tetraetracontane                                    | 8015DRO   | AE51011 | 05/10/05                  | 05/11/05 |          | 53.1 %                         | 20-152 |      |
| Surrogate: Toluene-d8  | 8260GRO   | AE51705 | 05/16/05                  | 05/17/05 |          | 115 %                          | 70-129 |      |

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 6 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD             | BATCH   | PREPARED | ANALYZED | DILUTION | RESULT                  | PQL    | NOTE |
|--|--------------------|---------|----------|----------|----------|-------------------------|--------|------|
| SB-17 (A505227-07)                             | Sample Type: Water |         |          |          |          | Sampled: 05/05/05 17:45 |        |      |
| Volatile Organic Compounds by EPA Method 8260B |                    |         |          |          |          |                         |        | R-06 |
| Benzene  | EPA 8260B          | AE51718 | "        | 05/17/05 | 20       | 160 ug/l                | 6.0    |      |
| Toluene  | "                  | "       | "        | "        | "        | ND "                    | 6.0    |      |
| Ethylbenzene                                   | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Xylenes (total)                                | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Methyl tert-butyl ether                        | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Di-isopropyl ether                             | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Ethyl tert-butyl ether                         | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Tert-amyl methyl ether                         | "                  | "       | "        | "        | "        | ND "                    | 10     |      |
| Tert-butyl alcohol                             | "                  | "       | "        | "        | "        | ND "                    | 200    |      |
| Surrogate: Bromofluorobenzene                  | "                  | "       | "        | "        |          | 98.8 %                  | 45-147 |      |
| Surrogate: Dibromofluoromethane                | "                  | "       | "        | "        |          | 99.6 %                  | 85-129 |      |
| Surrogate: Toluene-d8                          | "                  | "       | "        | "        |          | 115 %                   | 74-137 |      |

SB-18 (A505227-08)

Sample Type: Water

Sampled: 05/05/05 18:15

TPH by EPA/LUFT GC/GCMS Methods

|                             |         |         |          |          |   |         |        |
|-----------------------------|---------|---------|----------|----------|---|---------|--------|
| TPH as Diesel               | 8015DRO | AE51011 | 05/10/05 | 05/11/05 | 1 | ND ug/l | 50     |
| TPH as Gasoline             | 8260GRO | AE51705 | 05/16/05 | 05/17/05 | " | ND "    | 50     |
| Surrogate: Tetraetracontane | 8015DRO | AE51011 | 05/10/05 | 05/11/05 |   | 43.5 %  | 20-152 |
| Surrogate: Toluene-d8       | 8260GRO | AE51705 | 05/16/05 | 05/17/05 |   | 105 %   | 70-129 |

Volatile Organic Compounds by EPA Method 8260B

|                               |           |         |   |          |   |         |        |
|-------------------------------|-----------|---------|---|----------|---|---------|--------|
| Benzene                       | EPA 8260B | AE51718 | " | 05/17/05 | 1 | ND ug/l | 0.30   |
| Toluene                       | "         | "       | " | "        | " | ND "    | 0.30   |
| Ethylbenzene                  | "         | "       | " | "        | " | ND "    | 0.50   |
| Xylenes (total)               | "         | "       | " | "        | " | ND "    | 0.50   |
| Methyl tert-butyl ether       | "         | "       | " | "        | " | ND "    | 0.50   |
| Di-isopropyl ether            | "         | "       | " | "        | " | ND "    | 0.50   |
| Ethyl tert-butyl ether        | "         | "       | " | "        | " | ND "    | 0.50   |
| Tert-amyl methyl ether        | "         | "       | " | "        | " | ND "    | 0.50   |
| Tert-butyl alcohol            | "         | "       | " | "        | " | ND "    | 10     |
| Surrogate: Bromofluorobenzene | "         | "       | " | "        |   | 91.6 %  | 45-147 |

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Project Manager

5/20/05





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**CHEMICAL EXAMINATION REPORT**

Page 7 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

**Alpha Analytical Laboratories, Inc.**

|  | METHOD    | BATCH | PREPARED | ANALYZED                  | DILUTION | RESULT                         | PQL    | NOTE |
|--|-----------|-------|----------|---------------------------|----------|--------------------------------|--------|------|
| <b>SB-18 (A505227-08)</b>                                      |           |       |          |                           |          |                                |        |      |
|  |           |       |          | <b>Sample Type: Water</b> |          | <b>Sampled: 05/05/05 18:15</b> |        |      |
| <b>Volatile Organic Compounds by EPA Method 8260B (cont'd)</b> |           |       |          |                           |          |                                |        |      |
| Surrogate: Dibromofluoromethane                                | EPA 8260B | "     | "        | 05/17/05                  |          | 95.6 %                         | 85-129 |      |
| Surrogate: Toluene-d8  | "         | "     | "        | "                         |          | 105 %                          | 74-137 |      |

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CHEMICAL EXAMINATION REPORT

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Order Number  
A505227

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05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

SourceResult

Metals by EPA 6000/7000 Series Methods - Quality Control

| Analyte(s)                                | Result | PQL | Units | Spike Level | Source Result                         | %REC | %REC Limits | RPD   | RPD Limit | Flag  |
|---|--------|-----|-------|-------------|---------------------------------------|------|-------------|-------|-----------|-------|
| <b>Batch AE51202 - EPA 3051 Microwave</b> |        |     |       |             |                                       |      |             |       |           |       |
| <b>Blank (AE51202-BLK1)</b>               |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | ND     | 5.0 | mg/kg |             |                                       |      |             |       |           |       |
| <b>LCS (AE51202-BS1)</b>                  |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | 20.2   | 5.0 | mg/kg | 20.0        |                                       | 101  | 85-115      |       |           |       |
| <b>LCS Dup (AE51202-BSD1)</b>             |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | 20.3   | 5.0 | mg/kg | 20.0        |                                       | 102  | 85-115      | 0.494 | 20        |       |
| <b>Duplicate (AE51202-DUP1)</b>           |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | 59.5   | 5.0 | mg/kg |             | 54                                    |      |             | 9.69  | 20        |       |
| <b>Matrix Spike (AE51202-MS1)</b>         |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | 54.0   | 5.0 | mg/kg | 20.0        | 54                                    | 0.00 | 70-130      |       |           | QM-04 |
| <b>Matrix Spike Dup (AE51202-MSD1)</b>    |        |     |       |             | Prepared: 05/12/05 Analyzed: 05/13/05 |      |             |       |           |       |
| Lead                                      | 78.1   | 5.0 | mg/kg | 20.0        | 54                                    | 120  | 70-130      | 36.5  | 20        | QM-04 |

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Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 9 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

| Analyte(s)                              | Result | PQL | Units | Spike Level                           | Source Result | %REC                                  | %REC Limits | RPD  | RPD Limit | Flag |
|---|--------|-----|-------|---------------------------------------|---------------|---------------------------------------|-------------|------|-----------|------|
| <b>Batch AE51011 - EPA 3510B Water</b>  |        |     |       |                                       |               |                                       |             |      |           |      |
| <b>Blank (AE51011-BLK1)</b>             |        |     |       | Prepared: 05/10/05 Analyzed: 05/11/05 |               |                                       |             |      |           |      |
| TPH as Diesel                           | ND     | 50  | ug/l  |                                       |               |                                       |             |      |           |      |
| Surrogate: Tetraetracontane             | 23.7   |     | "     | 110                                   |               | 21.5                                  | 20-152      |      |           |      |
| <b>LCS (AE51011-BS1)</b>                |        |     |       | Prepared: 05/10/05 Analyzed: 05/11/05 |               |                                       |             |      |           |      |
| TPH as Diesel                           | 1430   | 50  | ug/l  | 2000                                  |               | 71.5                                  | 52-136      |      |           |      |
| Surrogate: Tetraetracontane             | 86.6   |     | "     | 110                                   |               | 78.7                                  | 20-152      |      |           |      |
| <b>Matrix Spike (AE51011-MS1)</b>       |        |     |       | <b>Source: A505227-05</b>             |               | Prepared: 05/10/05 Analyzed: 05/11/05 |             |      |           |      |
| TPH as Diesel                           | 1660   | 50  | ug/l  | 2000                                  | ND            | 83.0                                  | 61-129      |      |           |      |
| Surrogate: Tetraetracontane             | 64.6   |     | "     | 110                                   |               | 58.7                                  | 20-152      |      |           |      |
| <b>Matrix Spike Dup (AE51011-MSD1)</b>  |        |     |       | <b>Source: A505227-05</b>             |               | Prepared: 05/10/05 Analyzed: 05/11/05 |             |      |           |      |
| TPH as Diesel                           | 1510   | 50  | ug/l  | 2000                                  | ND            | 75.5                                  | 61-129      | 9.46 | 25        |      |
| Surrogate: Tetraetracontane             | 67.4   |     | "     | 110                                   |               | 61.3                                  | 20-152      |      |           |      |
| <b>Batch AE51306 - EPA 5030 Soil GC</b> |        |     |       |                                       |               |                                       |             |      |           |      |
| <b>Blank (AE51306-BLK1)</b>             |        |     |       | Prepared & Analyzed: 05/17/05         |               |                                       |             |      |           |      |
| TPH as Gasoline                         | ND     | 1.0 | mg/kg |                                       |               |                                       |             |      |           |      |
| Surrogate: 1,4-Bromofluorobenzene       | 3.89   |     | "     | 4.00                                  |               | 97.2                                  | 60-156      |      |           |      |
| <b>LCS (AE51306-BS1)</b>                |        |     |       | Prepared & Analyzed: 05/17/05         |               |                                       |             |      |           |      |
| TPH as Gasoline                         | 20.3   | 1.0 | mg/kg | 24.0                                  |               | 84.6                                  | 77-139      |      |           |      |
| Surrogate: 1,4-Bromofluorobenzene       | 4.03   |     | "     | 4.00                                  |               | 101                                   | 60-156      |      |           |      |
| <b>LCS (AE51306-BS2)</b>                |        |     |       | Prepared & Analyzed: 05/17/05         |               |                                       |             |      |           |      |
| TPH as Gasoline                         | 20.9   | 1.0 | mg/kg | 24.0                                  |               | 87.1                                  | 77-139      |      |           |      |
| Surrogate: 1,4-Bromofluorobenzene       | 3.90   |     | "     | 4.00                                  |               | 97.5                                  | 60-156      |      |           |      |

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Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 10 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

| Analyte(s)                                  | Result | PQL                           | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|---|--------|-------------------------------|-------|-------------------------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch AE51306 - EPA 5030 Soil GC</b>     |        |                               |       |                               |               |      |             |      |           |       |
| <b>Matrix Spike (AE51306-MS1)</b>           |        | <b>Source: A505248-02</b>     |       | Prepared & Analyzed: 05/17/05 |               |      |             |      |           |       |
| TPH as Gasoline                             | 19.6   | 1.0                           | mg/kg | 24.0                          | 1.5           | 75.4 | 72-138      |      |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 3.87   |                               | "     | 4.00                          |               | 96.8 | 60-156      |      |           |       |
| <b>Batch AE51315 - CA LUFT - orb shaker</b> |        |                               |       |                               |               |      |             |      |           |       |
| <b>Blank (AE51315-BLK1)</b>                 |        | Prepared & Analyzed: 05/13/05 |       |                               |               |      |             |      |           |       |
| TPH as Diesel                               | 1.75   | 1.0                           | mg/kg |                               |               |      |             |      |           | QB-03 |
| Surrogate: 1,4-Bromofluorobenzene           | 7.15   |                               | "     | 11.6                          |               | 61.6 | 20-152      |      |           |       |
| <b>LCS (AE51315-BS1)</b>                    |        | Prepared & Analyzed: 05/13/05 |       |                               |               |      |             |      |           |       |
| TPH as Diesel                               | 37.2   | 1.0                           | mg/kg | 39.2                          |               | 94.9 | 63-126      |      |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 8.41   |                               | "     | 11.6                          |               | 72.5 | 20-152      |      |           |       |
| <b>Matrix Spike (AE51315-MS1)</b>           |        | <b>Source: A505227-04</b>     |       | Prepared & Analyzed: 05/13/05 |               |      |             |      |           |       |
| TPH as Diesel                               | 35.6   | 1.0                           | mg/kg | 39.2                          | ND            | 90.8 | 61-134      |      |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 8.00   |                               | "     | 11.6                          |               | 69.0 | 20-152      |      |           |       |
| <b>Matrix Spike Dup (AE51315-MSD1)</b>      |        | <b>Source: A505227-04</b>     |       | Prepared & Analyzed: 05/13/05 |               |      |             |      |           |       |
| TPH as Diesel                               | 36.4   | 1.0                           | mg/kg | 39.2                          | ND            | 92.9 | 61-134      | 2.22 | 20        |       |
| Surrogate: 1,4-Bromofluorobenzene           | 7.91   |                               | "     | 11.6                          |               | 68.2 | 20-152      |      |           |       |
| <b>Batch AE51705 - EPA 5030 Water GCMS</b>  |        |                               |       |                               |               |      |             |      |           |       |
| <b>Blank (AE51705-BLK1)</b>                 |        | Prepared & Analyzed: 05/16/05 |       |                               |               |      |             |      |           |       |
| TPH as Gasoline                             | ND     | 50                            | ug/l  |                               |               |      |             |      |           |       |
| Surrogate: Toluene-d8                       | 27.1   |                               | "     | 25.0                          |               | 108  | 70-129      |      |           |       |

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Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 11 of 20

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Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

| Analyte(s)                                 | Result | PQL | Units | Spike Level  | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|--|--------|-----|-------|--|---------------|------|-------------|------|-----------|------|
| <b>Batch AE51705 - EPA 5030 Water GCMS</b> |        |     |       |  |               |      |             |      |           |      |
| <b>LCS (AE51705-BS1)</b>                   |        |     |       | Prepared & Analyzed: 05/16/05                            |               |      |             |      |           |      |
| TPH as Gasoline                            | 204    | 50  | ug/l  | 200  |               | 102  | 65-137      |      |           |      |
| Surrogate: Toluene-d8                      | 26.6   |     | "     | 25.0   |               | 106  | 70-129      |      |           |      |
| <b>LCS Dup (AE51705-BS1)</b>               |        |     |       | Prepared & Analyzed: 05/16/05                            |               |      |             |      |           |      |
| TPH as Gasoline                            | 207    | 50  | ug/l  | 200  |               | 104  | 65-137      | 1.46 | 20        |      |
| Surrogate: Toluene-d8                      | 28.4   |     | "     | 25.0   |               | 114  | 70-129      |      |           |      |
| <b>Matrix Spike (AE51705-MS1)</b>          |        |     |       | Source: A505227-06 Prepared: 05/16/05 Analyzed: 05/17/05 |               |      |             |      |           |      |
| TPH as Gasoline                            | 236    | 50  | ug/l  | 200  | ND            | 112  | 65-137      |      |           |      |
| Surrogate: Toluene-d8                      | 31.2   |     | "     | 25.0   |               | 125  | 70-129      |      |           |      |

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Alpha Analytical Laboratories Inc.

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CHEMICAL EXAMINATION REPORT

Page 12 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                                 | Result | PQL  | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|--|--------|------|-------|-------------------------------|---------------|------|-------------|-----|-----------|-------|
| <b>Batch AE51718 - EPA 5030 Water GCMS</b> |        |      |       |                               |               |      |             |     |           |       |
| <b>Blank (AE51718-BLK1)</b>                |        |      |       | Prepared & Analyzed: 05/16/05 |               |      |             |     |           |       |
| Benzene                                    | ND     | 0.30 | ug/l  |                               |               |      |             |     |           |       |
| Toluene                                    | ND     | 0.30 | "     |                               |               |      |             |     |           |       |
| Ethylbenzene                               | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Xylenes (total)                            | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Methyl tert-butyl ether                    | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Di-isopropyl ether                         | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Ethyl tert-butyl ether                     | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Tert-amyl methyl ether                     | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Tert-butyl alcohol                         | ND     | 10   | "     |                               |               |      |             |     |           |       |
| Surrogate: Bromofluorobenzene              | 24.0   |      | "     | 25.0                          |               | 96.0 | 45-147      |     |           |       |
| Surrogate: Dibromofluoromethane            | 25.4   |      | "     | 25.0                          |               | 102  | 85-129      |     |           |       |
| Surrogate: Toluene-d8                      | 27.1   |      | "     | 25.0                          |               | 108  | 74-137      |     |           |       |
| <b>LCS (AE51718-BS1)</b>                   |        |      |       | Prepared & Analyzed: 05/16/05 |               |      |             |     |           |       |
| Benzene                                    | 9.99   | 0.30 | ug/l  | 10.0                          |               | 99.9 | 79-116      |     |           |       |
| Toluene                                    | 10.9   | 0.30 | "     | 10.0                          |               | 109  | 83-120      |     |           |       |
| Ethylbenzene                               | 11.1   | 0.50 | "     | 10.0                          |               | 111  | 81-119      |     |           |       |
| Xylenes (total)                            | 31.8   | 0.50 | "     | 30.0                          |               | 106  | 79-121      |     |           |       |
| Methyl tert-butyl ether                    | 11.3   | 0.50 | "     | 10.0                          |               | 113  | 73-127      |     |           |       |
| Di-isopropyl ether                         | 11.4   | 0.50 | "     | 10.1                          |               | 113  | 69-96       |     |           | QL-03 |
| Ethyl tert-butyl ether                     | 10.9   | 0.50 | "     | 10.2                          |               | 107  | 76-117      |     |           |       |
| Tert-amyl methyl ether                     | 12.2   | 0.50 | "     | 10.3                          |               | 118  | 80-122      |     |           |       |
| Tert-butyl alcohol                         | 223    | 10   | "     | 196                           |               | 114  | 53-132      |     |           |       |
| Surrogate: Bromofluorobenzene              | 24.8   |      | "     | 25.0                          |               | 99.2 | 45-147      |     |           |       |
| Surrogate: Dibromofluoromethane            | 23.9   |      | "     | 25.0                          |               | 95.6 | 85-129      |     |           |       |
| Surrogate: Toluene-d8                      | 26.4   |      | "     | 25.0                          |               | 106  | 74-137      |     |           |       |

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 13 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                                 | Result | PQL  | Units | Spike Level                                      | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|--|--------|------|-------|--|---------------|------|-------------|------|-----------|-------|
| <b>Batch AE51718 - EPA 5030 Water GCMS</b> |        |      |       |  |               |      |             |      |           |       |
| <b>LCS Dup (AE51718-BS01)</b>              |        |      |       | Prepared & Analyzed: 05/16/05                    |               |      |             |      |           |       |
| Benzene                                    | 10.4   | 0.30 | ug/l  | 10.0   |               | 104  | 79-116      | 4.02 | 25        |       |
| Toluene                                    | 11.2   | 0.30 | "     | 10.0   |               | 112  | 83-120      | 2.71 | 25        |       |
| Ethylbenzene                               | 11.6   | 0.50 | "     | 10.0   |               | 116  | 81-119      | 4.41 | 25        |       |
| Xylenes (total)                            | 32.9   | 0.50 | "     | 30.0   |               | 110  | 79-121      | 3.40 | 25        |       |
| Methyl tert-butyl ether                    | 11.8   | 0.50 | "     | 10.0   |               | 118  | 73-127      | 4.33 | 25        |       |
| Di-isopropyl ether                         | 12.0   | 0.50 | "     | 10.1   |               | 119  | 69-96       | 5.13 | 25        | QL-03 |
| Ethyl tert-butyl ether                     | 11.5   | 0.50 | "     | 10.2   |               | 113  | 76-117      | 5.36 | 25        |       |
| Tert-amyl methyl ether                     | 12.6   | 0.50 | "     | 10.3   |               | 122  | 80-122      | 3.23 | 25        |       |
| Tert-butyl alcohol                         | 250    | 10   | "     | 196  |               | 128  | 53-132      | 11.4 | 25        |       |
| Surrogate: Bromofluorobenzene              | 26.5   |      | "     | 25.0   |               | 106  | 45-147      |      |           |       |
| Surrogate: Dibromofluoromethane            | 25.2   |      | "     | 25.0   |               | 101  | 85-129      |      |           |       |
| Surrogate: Toluene-d8                      | 28.3   |      | "     | 25.0   |               | 113  | 74-137      |      |           |       |
| <b>Matrix Spike (AE51718-MS1)</b>          |        |      |       | Source: A505226-03 Prepared & Analyzed: 05/16/05 |               |      |             |      |           |       |
| Benzene                                    | 10.1   | 0.30 | ug/l  | 10.0   | ND            | 101  | 63-144      |      |           |       |
| Toluene                                    | 10.8   | 0.30 | "     | 10.0   | ND            | 108  | 65-145      |      |           |       |
| Ethylbenzene                               | 11.0   | 0.50 | "     | 10.0   | ND            | 110  | 57-155      |      |           |       |
| Xylenes (total)                            | 31.0   | 0.50 | "     | 30.0   | ND            | 103  | 59-149      |      |           |       |
| Methyl tert-butyl ether                    | 11.6   | 0.50 | "     | 10.0   | ND            | 116  | 62-156      |      |           |       |
| Di-isopropyl ether                         | 11.7   | 0.50 | "     | 10.1   | ND            | 116  | 58-115      |      |           | QM-05 |
| Ethyl tert-butyl ether                     | 11.0   | 0.50 | "     | 10.2   | ND            | 108  | 57-147      |      |           |       |
| Tert-amyl methyl ether                     | 12.2   | 0.50 | "     | 10.3   | ND            | 118  | 53-153      |      |           |       |
| Tert-butyl alcohol                         | 257    | 10   | "     | 196  | ND            | 131  | 41-147      |      |           |       |
| Surrogate: Bromofluorobenzene              | 23.3   |      | "     | 25.0   |               | 93.2 | 45-147      |      |           |       |
| Surrogate: Dibromofluoromethane            | 22.5   |      | "     | 25.0   |               | 90.0 | 85-129      |      |           |       |
| Surrogate: Toluene-d8                      | 24.8   |      | "     | 25.0   |               | 99.2 | 74-137      |      |           |       |

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Project Manager

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CHEMICAL EXAMINATION REPORT

Page 14 of 20

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930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

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05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                                 | Result | PQL  | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|--|--------|------|-------|-------------------------------|---------------|------|-------------|-----|-----------|-------|
| <b>Batch AE51918 - EPA 5030 Water GCMS</b> |        |      |       |                               |               |      |             |     |           |       |
| <b>Blank (AE51918-BLK1)</b>                |        |      |       | Prepared & Analyzed: 05/18/05 |               |      |             |     |           |       |
| Benzene                                    | ND     | 0.30 | ug/l  |                               |               |      |             |     |           |       |
| Toluene                                    | ND     | 0.30 | "     |                               |               |      |             |     |           |       |
| Ethylbenzene                               | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Xylenes (total)                            | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Methyl tert-butyl ether                    | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Di-isopropyl ether                         | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Ethyl tert-butyl ether                     | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Tert-amyl methyl ether                     | ND     | 0.50 | "     |                               |               |      |             |     |           |       |
| Tert-butyl alcohol                         | ND     | 10   | "     |                               |               |      |             |     |           |       |
| Surrogate: Bromofluorobenzene              | 24.4   |      | "     | 25.0                          |               | 97.6 | 45-147      |     |           |       |
| Surrogate: Dibromofluoromethane            | 21.4   |      | "     | 25.0                          |               | 85.6 | 85-129      |     |           |       |
| Surrogate: Toluene-d8                      | 26.4   |      | "     | 25.0                          |               | 106  | 74-137      |     |           |       |
| <b>LCS (AE51918-BS1)</b>                   |        |      |       | Prepared & Analyzed: 05/18/05 |               |      |             |     |           |       |
| Benzene                                    | 9.17   | 0.30 | ug/l  | 10.0                          |               | 91.7 | 79-116      |     |           |       |
| Toluene                                    | 10.3   | 0.30 | "     | 10.0                          |               | 103  | 83-120      |     |           |       |
| Ethylbenzene                               | 10.5   | 0.50 | "     | 10.0                          |               | 105  | 81-119      |     |           |       |
| Xylenes (total)                            | 30.0   | 0.50 | "     | 30.0                          |               | 100  | 79-121      |     |           |       |
| Methyl tert-butyl ether                    | 11.4   | 0.50 | "     | 10.0                          |               | 114  | 73-127      |     |           |       |
| Di-isopropyl ether                         | 10.5   | 0.50 | "     | 10.1                          |               | 104  | 69-96       |     |           | QL-03 |
| Ethyl tert-butyl ether                     | 11.5   | 0.50 | "     | 10.2                          |               | 113  | 76-117      |     |           |       |
| Tert-amyl methyl ether                     | 13.0   | 0.50 | "     | 10.3                          |               | 126  | 80-122      |     |           | QL-03 |
| Tert-butyl alcohol                         | 196    | 10   | "     | 196                           |               | 100  | 53-132      |     |           |       |
| Surrogate: Bromofluorobenzene              | 24.5   |      | "     | 25.0                          |               | 98.0 | 45-147      |     |           |       |
| Surrogate: Dibromofluoromethane            | 21.6   |      | "     | 25.0                          |               | 86.4 | 85-129      |     |           |       |
| Surrogate: Toluene-d8                      | 25.6   |      | "     | 25.0                          |               | 102  | 74-137      |     |           |       |

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Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 15 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                                 | Result | PQL  | Units | Spike Level | Source Result                                    | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|--|--------|------|-------|-------------|--|------|-------------|------|-----------|-------|
| <b>Batch AE51918 - EPA 5030 Water GCMS</b> |        |      |       |             |  |      |             |      |           |       |
| <b>LCS Dup (AE51918-BSD1)</b>              |        |      |       |             | Prepared & Analyzed: 05/18/05                    |      |             |      |           |       |
| Benzene                                    | 8.51   | 0.30 | ug/l  | 10.0        |  | 85.1 | 79-116      | 7.47 | 25        |       |
| Toluene                                    | 9.33   | 0.30 | "     | 10.0        |  | 93.3 | 83-120      | 9.88 | 25        |       |
| Ethylbenzene                               | 9.67   | 0.50 | "     | 10.0        |  | 96.7 | 81-119      | 8.23 | 25        |       |
| Xylenes (total)                            | 27.3   | 0.50 | "     | 30.0        |  | 91.0 | 79-121      | 9.42 | 25        |       |
| Methyl tert-butyl ether                    | 11.0   | 0.50 | "     | 10.0        |  | 110  | 73-127      | 3.57 | 25        |       |
| Di-isopropyl ether                         | 9.81   | 0.50 | "     | 10.1        |  | 97.1 | 69-96       | 6.79 | 25        | QL-03 |
| Ethyl tert-butyl ether                     | 11.2   | 0.50 | "     | 10.2        |  | 110  | 76-117      | 2.64 | 25        |       |
| Tert-amyl methyl ether                     | 12.4   | 0.50 | "     | 10.3        |  | 120  | 80-122      | 4.72 | 25        |       |
| Tert-butyl alcohol                         | 219    | 10   | "     | 196         |  | 112  | 53-132      | 11.1 | 25        |       |
| Surrogate: Bromofluorobenzene              | 23.2   |      | "     | 25.0        |  | 92.8 | 45-147      |      |           |       |
| Surrogate: Dibromofluoromethane            | 20.6   |      | "     | 25.0        |  | 82.4 | 85-129      |      |           | S-GC  |
| Surrogate: Toluene-d8                      | 24.1   |      | "     | 25.0        |  | 96.4 | 74-137      |      |           |       |
| <b>Matrix Spike (AE51918-MS1)</b>          |        |      |       |             | Source: A505276-01 Prepared & Analyzed: 05/18/05 |      |             |      |           |       |
| Benzene                                    | 4.78   | 0.30 | ug/l  | 10.0        | ND   | 47.8 | 63-144      |      |           | QM-05 |
| Toluene                                    | 5.28   | 0.30 | "     | 10.0        | ND   | 52.8 | 65-145      |      |           | QM-05 |
| Ethylbenzene                               | 5.01   | 0.50 | "     | 10.0        | ND   | 50.1 | 57-155      |      |           | QM-05 |
| Xylenes (total)                            | 14.4   | 0.50 | "     | 30.0        | ND   | 48.0 | 59-149      |      |           | QM-05 |
| Methyl tert-butyl ether                    | 5.43   | 0.50 | "     | 10.0        | ND   | 54.3 | 62-156      |      |           | QM-05 |
| Di-isopropyl ether                         | 4.97   | 0.50 | "     | 10.1        | ND   | 49.2 | 58-115      |      |           | QM-05 |
| Ethyl tert-butyl ether                     | 6.34   | 0.50 | "     | 10.2        | ND   | 62.2 | 57-147      |      |           |       |
| Tert-amyl methyl ether                     | 6.10   | 0.50 | "     | 10.3        | ND   | 59.2 | 53-153      |      |           |       |
| Tert-butyl alcohol                         | 116    | 10   | "     | 196         | ND   | 59.2 | 41-147      |      |           |       |
| Surrogate: Bromofluorobenzene              | 26.1   |      | "     | 25.0        |  | 104  | 45-147      |      |           |       |
| Surrogate: Dibromofluoromethane            | 24.0   |      | "     | 25.0        |  | 96.0 | 85-129      |      |           |       |
| Surrogate: Toluene-d8                      | 27.8   |      | "     | 25.0        |  | 111  | 74-137      |      |           |       |

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Project Manager

5/20/05



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Page 16 of 20

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Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Methods 8260B/5035 - Quality Control

| Analyte(s)                           | Result | PQL  | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag        |
|--------------------------------------|--------|------|-------|-------------------------------|---------------|------|-------------|------|-----------|-------------|
| <b>Batch AE51216 - EPA 5035 GCMS</b> |        |      |       |                               |               |      |             |      |           |             |
| <b>Blank (AE51216-BLK1)</b>          |        |      |       | Prepared & Analyzed: 05/11/05 |               |      |             |      |           | <b>R-11</b> |
| Benzene                              | ND     | 0.17 | mg/kg |                               |               |      |             |      |           |             |
| Toluene                              | ND     | 0.17 | "     |                               |               |      |             |      |           |             |
| Ethylbenzene                         | ND     | 0.17 | "     |                               |               |      |             |      |           |             |
| Xylenes (total)                      | ND     | 0.17 | "     |                               |               |      |             |      |           |             |
| Methyl tert-butyl ether              | ND     | 0.17 | "     |                               |               |      |             |      |           |             |
| Surrogate: Bromofluorobenzene        | 4.34   |      | "     | 4.33                          |               | 100  | 68-113      |      |           |             |
| Surrogate: Dibromofluoromethane      | 4.84   |      | "     | 4.33                          |               | 112  | 40-140      |      |           |             |
| Surrogate: Toluene-d8                | 5.33   |      | "     | 4.33                          |               | 123  | 61-119      |      |           | S-GC        |
| <b>LCS (AE51216-BS1)</b>             |        |      |       | Prepared & Analyzed: 05/11/05 |               |      |             |      |           |             |
| Benzene                              | 1.71   | 0.17 | mg/kg | 1.73                          |               | 98.8 | 72-123      |      |           |             |
| Toluene                              | 1.89   | 0.17 | "     | 1.73                          |               | 109  | 72-126      |      |           |             |
| Ethylbenzene                         | 1.87   | 0.17 | "     | 1.73                          |               | 108  | 71-125      |      |           |             |
| Xylenes (total)                      | 5.41   | 0.17 | "     | 5.19                          |               | 104  | 67-127      |      |           |             |
| Methyl tert-butyl ether              | 1.91   | 0.17 | "     | 1.73                          |               | 110  | 71-127      |      |           |             |
| Surrogate: Bromofluorobenzene        | 4.77   |      | "     | 4.33                          |               | 110  | 68-113      |      |           |             |
| Surrogate: Dibromofluoromethane      | 4.59   |      | "     | 4.33                          |               | 106  | 40-140      |      |           |             |
| Surrogate: Toluene-d8                | 5.16   |      | "     | 4.33                          |               | 119  | 61-119      |      |           |             |
| <b>LCS Dup (AE51216-BS1)</b>         |        |      |       | Prepared & Analyzed: 05/11/05 |               |      |             |      |           |             |
| Benzene                              | 1.57   | 0.17 | mg/kg | 1.73                          |               | 90.8 | 72-123      | 8.54 | 25        |             |
| Toluene                              | 1.71   | 0.17 | "     | 1.73                          |               | 98.8 | 72-126      | 10.0 | 25        |             |
| Ethylbenzene                         | 1.70   | 0.17 | "     | 1.73                          |               | 98.3 | 71-125      | 9.52 | 25        |             |
| Xylenes (total)                      | 5.08   | 0.17 | "     | 5.19                          |               | 97.9 | 67-127      | 6.29 | 25        |             |
| Methyl tert-butyl ether              | 1.79   | 0.17 | "     | 1.73                          |               | 103  | 71-127      | 6.49 | 25        |             |
| Surrogate: Bromofluorobenzene        | 4.35   |      | "     | 4.33                          |               | 100  | 68-113      |      |           |             |

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Project Manager

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A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Methods 8260B/5035 - Quality Control

| Analyte(s)                           | Result  | PQL    | Units | Spike Level  | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|--------------------------------------|---------|--------|-------|--|---------------|------|-------------|-----|-----------|-------|
| <b>Batch AE51216 - EPA 5035 GCMS</b> |         |        |       |  |               |      |             |     |           |       |
| <b>LCS Dup (AE51216-BSD1)</b>        |         |        |       |  |               |      |             |     |           |       |
|                                      |         |        |       | Prepared & Analyzed: 05/11/05                            |               |      |             |     |           |       |
| Surrogate: Dibromofluoromethane      | 4.12    |        | "     | 4.33   |               | 95.2 | 40-140      |     |           |       |
| Surrogate: Toluene-d8                | 4.74    |        | "     | 4.33   |               | 109  | 61-119      |     |           |       |
| <b>Matrix Spike (AE51216-MS1)</b>    |         |        |       |  |               |      |             |     |           |       |
|                                      |         |        |       | Source: A505182-01 Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |     |           |       |
| Benzene                              | 0.643   | 0.17   | mg/kg | 1.73   | ND            | 37.2 | 49-137      |     |           | QM-05 |
| Toluene                              | 0.778   | 0.17   | "     | 1.73   | ND            | 45.0 | 50-148      |     |           | QM-05 |
| Ethylbenzene                         | 0.752   | 0.17   | "     | 1.73   | ND            | 43.5 | 55-138      |     |           | QM-05 |
| Xylenes (total)                      | 2.26    | 0.17   | "     | 5.19   | ND            | 43.5 | 54-139      |     |           | QM-05 |
| Methyl tert-butyl ether              | 0.823   | 0.17   | "     | 1.73   | ND            | 47.6 | 50-140      |     |           | QM-05 |
| Surrogate: Bromofluorobenzene        | 4.79    |        | "     | 4.33   |               | 111  | 68-113      |     |           |       |
| Surrogate: Dibromofluoromethane      | 3.96    |        | "     | 4.33   |               | 91.5 | 40-140      |     |           |       |
| Surrogate: Toluene-d8                | 5.09    |        | "     | 4.33   |               | 118  | 61-119      |     |           |       |
| <b>Batch AE51612 - EPA 5035 GCMS</b> |         |        |       |  |               |      |             |     |           |       |
| <b>Blank (AE51612-BLK1)</b>          |         |        |       |  |               |      |             |     |           |       |
|                                      |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05                    |               |      |             |     |           |       |
| Benzene                              | ND      | 0.0050 | mg/kg |  |               |      |             |     |           |       |
| Toluene                              | ND      | 0.0050 | "     |  |               |      |             |     |           |       |
| Ethylbenzene                         | ND      | 0.0050 | "     |  |               |      |             |     |           |       |
| Xylenes (total)                      | ND      | 0.0050 | "     |  |               |      |             |     |           |       |
| Methyl tert-butyl ether              | ND      | 0.0050 | "     |  |               |      |             |     |           |       |
| Surrogate: Bromofluorobenzene        | 0.0237  |        | "     | 0.0250   |               | 94.8 | 68-113      |     |           |       |
| Surrogate: Dibromofluoromethane      | 0.0256  |        | "     | 0.0250   |               | 102  | 40-140      |     |           |       |
| Surrogate: Toluene-d8                | 0.0276  |        | "     | 0.0250   |               | 110  | 61-119      |     |           |       |
| <b>LCS (AE51612-BS1)</b>             |         |        |       |  |               |      |             |     |           |       |
|                                      |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05                    |               |      |             |     |           |       |
| Benzene                              | 0.00438 | 0.0050 | mg/kg | 0.00500  |               | 87.6 | 72-123      |     |           |       |

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lisa E. Jansen For Sheri L. Spears  
Project Manager

5/20/05



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 18 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Methods 8260B/5035 - Quality Control

| Analyte(s)                           | Result  | PQL    | Units | Spike Level  | Source Result | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|--------------------------------------|---------|--------|-------|--|---------------|------|-------------|-------|-----------|------|
| <b>Batch AE51612 - EPA 5035 GCMS</b> |         |        |       |  |               |      |             |       |           |      |
| <b>LCS (AE51612-BS1)</b>             |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05                    |               |      |             |       |           |      |
| Toluene                              | 0.00520 | 0.0050 | "     | 0.00500  |               | 104  | 72-126      |       |           |      |
| Ethylbenzene                         | 0.00491 | 0.0050 | "     | 0.00500  |               | 98.2 | 71-125      |       |           |      |
| Xylenes (total)                      | 0.0149  | 0.0050 | "     | 0.0150   |               | 99.3 | 67-127      |       |           |      |
| Methyl tert-butyl ether              | 0.00576 | 0.0050 | "     | 0.00500  |               | 115  | 71-127      |       |           |      |
| Surrogate: Bromofluorobenzene        | 0.0274  |        | "     | 0.0250   |               | 110  | 68-113      |       |           |      |
| Surrogate: Dibromofluoromethane      | 0.0228  |        | "     | 0.0250   |               | 91.2 | 40-140      |       |           |      |
| Surrogate: Toluene-d8                | 0.0296  |        | "     | 0.0250   |               | 118  | 61-119      |       |           |      |
| <b>LCS Dup (AE51612-BSD1)</b>        |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05                    |               |      |             |       |           |      |
| Benzene                              | 0.00441 | 0.0050 | mg/kg | 0.00500  |               | 88.2 | 72-123      | 0.683 | 25        |      |
| Toluene                              | 0.00492 | 0.0050 | "     | 0.00500  |               | 98.4 | 72-126      | 5.53  | 25        |      |
| Ethylbenzene                         | 0.00464 | 0.0050 | "     | 0.00500  |               | 92.8 | 71-125      | 5.65  | 25        |      |
| Xylenes (total)                      | 0.0140  | 0.0050 | "     | 0.0150   |               | 93.3 | 67-127      | 6.23  | 25        |      |
| Methyl tert-butyl ether              | 0.00561 | 0.0050 | "     | 0.00500  |               | 112  | 71-127      | 2.64  | 25        |      |
| Surrogate: Bromofluorobenzene        | 0.0263  |        | "     | 0.0250   |               | 105  | 68-113      |       |           |      |
| Surrogate: Dibromofluoromethane      | 0.0270  |        | "     | 0.0250   |               | 108  | 40-140      |       |           |      |
| Surrogate: Toluene-d8                | 0.0285  |        | "     | 0.0250   |               | 114  | 61-119      |       |           |      |
| <b>Matrix Spike (AE51612-MS1)</b>    |         |        |       | Source: A505248-01 Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |       |           |      |
| Benzene                              | 0.00436 | 0.0050 | mg/kg | 0.00500  | ND            | 87.2 | 49-137      |       |           |      |
| Toluene                              | 0.00511 | 0.0050 | "     | 0.00500  | ND            | 102  | 50-148      |       |           |      |
| Ethylbenzene                         | 0.00454 | 0.0050 | "     | 0.00500  | ND            | 90.8 | 55-138      |       |           |      |
| Xylenes (total)                      | 0.0133  | 0.0050 | "     | 0.0150   | ND            | 88.7 | 54-139      |       |           |      |
| Methyl tert-butyl ether              | 0.00556 | 0.0050 | "     | 0.00500  | ND            | 111  | 50-140      |       |           |      |
| Surrogate: Bromofluorobenzene        | 0.0244  |        | "     | 0.0250   |               | 97.6 | 68-113      |       |           |      |
| Surrogate: Dibromofluoromethane      | 0.0263  |        | "     | 0.0250   |               | 105  | 40-140      |       |           |      |

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



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CHEMICAL EXAMINATION REPORT

Page 19 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Methods 8260B/5035 - Quality Control

| Analyte(s) | Result | PQL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|------------|--------|-----|-------|-------------|---------------|------|-------------|-----|-----------|------|
|------------|--------|-----|-------|-------------|---------------|------|-------------|-----|-----------|------|

Batch AE51612 - EPA 5035 GCMS

Matrix Spike (AE51612-MS1)

Source: A505248-01

Prepared: 05/11/05 Analyzed: 05/12/05

Surrogate: Toluene-d8

0.0280

"

0.0250

112

61-119

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Lisa E. Jansen For Sheri L. Speaks  
Project Manager

5/20/05



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## CHEMICAL EXAMINATION REPORT

Page 20 of 20

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/20/05 08:56  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505227

Receipt Date/Time  
05/06/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

### Notes and Definitions

- S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates.
- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- R-11 All samples and QC in the batch were analyzed to meet high-level reporting limits.
- R-06 The Reporting Limits for this analysis have been raised to account for matrix interference.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- QM-04 High RPD and/or poor percent recovery may reflect sample non-homogeneity.
- QL-03 Although the LCS/LCSD recovery for this analyte is outside of in-house developed control limits, it is within the EPA recommended range of 70-130%.
- QB-03 The method blank contains analyte at a concentration above the MRL; sample reporting limits were raised as necessary.
- D-07 Analysis of this sample indicates the presence of hydrocarbons lower in molecular weight than diesel.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- PQL Practical Quantitation Limit





## Work Order

# Chain of Custody Record

**Alpha Analytical Laboratories Inc.**  
e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267  
208 Mason Street, Ukiah, California 95482

Lab No. A505227 Page 1 of 2

| Company Name:                         |       | Project Name:    |  | Project Number: |  |
|---------------------------------------|-------|------------------|--|-----------------|--|
| Mailing Address:                      |       | Project Address: |  | Quote #         |  |
| Project Contact (Hardcopy or PDF to): |       | P.O. #           |  | Bill to:        |  |
| Phone/Fax:                            |       | Sampling         |  | Container       |  |
| Samplers Signature:                   |       | Date             |  | Time            |  |
| Sample Designation                    |       | 40ml VOA         |  | Poly            |  |
|                                       |       | Amber            |  | Sleeve          |  |
|                                       |       | HCL              |  | HNO3            |  |
|                                       |       | H2SO4            |  | None            |  |
|                                       |       | Matrix           |  | Water           |  |
|                                       |       | Soil             |  |                 |  |
| SB-15-5.5                             | 5-5-0 | 11:25            |  |                 |  |
| SB-15-8.5                             | 5-5-0 | 11:26            |  |                 |  |
| SB-15-7.0                             | 5-5-0 | 11:30            |  |                 |  |
| SB-15-13.0                            | 5-5-0 | 11:50            |  |                 |  |
| SB-16-5.5                             | 5-5-0 | 12:30            |  |                 |  |
| SB-16-10.5                            | 5-5-0 | 12:55            |  |                 |  |
| SB-16-14                              | 5-5-0 | 1:05             |  |                 |  |
| SB-17-10                              | 5-5-0 | 4:05             |  |                 |  |
| SB-17-14                              | 5-5-0 | 4:10             |  |                 |  |
| SB-18-10                              | 5-5-0 | 5:40             |  |                 |  |
| Relinquished by:                      |       | Received by:     |  | Date            |  |
| Relinquished by:                      |       | Received by:     |  | Time            |  |
| Relinquished by:                      |       | Received by:     |  | Date            |  |
| Relinquished by:                      |       | Received by:     |  | Time            |  |

Signature below authorizes work under terms stated on reverse side.

Signature

Analysis Request

TAT

24 hr ☐

48 hr ☐

Lab Approval Required ☐

1 wk ☐

2 wk (standard) ☒

| Analysis Request | TAT  |
|------------------|------|
| hold             | hold |
| EPA 5033         | 1    |
| hold             | hold |
| hold             | hold |
| EPA 5033         | 2    |
| hold             | hold |
| EPA 5033         | 3    |
| hold             | hold |
| EPA 5033         | 4    |

Signature below authorizes work under terms stated on reverse side.

Signature

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TAT

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48 hr ☐

Lab Approval Required ☐

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Analysis Request</



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

19 May 2005

Trans Tech Consultants

Attn: Bill Wiggins

930 Shiloh Rd., Bldg.44, Suite J

Windsor, CA 95492

RE: Fern Cafe

Work Order: A505248

Enclosed are the results of analyses for samples received by the laboratory on 05/09/05 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks  
Project Manager



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 1 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg. 44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID  | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|------------|---------------|--------|----------------|----------------|
| SB-15-13.0 | A505248-01    | Soil   | 05/05/05 11:50 | 05/09/05 12:00 |
| SB-16-14'  | A505248-02    | Soil   | 05/05/05 13:05 | 05/09/05 12:00 |

Receive date indicates date additional analyses requested. Actual receive date was 5/6/05.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

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CHEMICAL EXAMINATION REPORT

Page 2 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
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Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD    | BATCH   | PREPARED          | ANALYZED | DILUTION                | RESULT   | PQL    | NOTE  |
|--|-----------|---------|-------------------|----------|-------------------------|----------|--------|-------|
| SB-15-13.0 (A505248-01)                        |           |         |                   |          |                         |          |        |       |
|  |           |         | Sample Type: Soil |          | Sampled: 05/05/05 11:50 |          |        |       |
| TPH by EPA/LUFT GC/GCMS Methods                |           |         |                   |          |                         |          |        |       |
| TPH as Diesel                                  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1                       | ND mg/kg | 1.0    |       |
| TPH as Gasoline                                | 8015GRO   | AE51306 | 05/10/05          | 05/17/05 | "                       | ND "     | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene              | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 |                         | 58.4 %   | 20-152 |       |
| Surrogate: 1,4-Bromofluorobenzene              | 8015GRO   | AE51306 | 05/10/05          | 05/17/05 |                         | 90.0 %   | 60-156 |       |
| Volatile Organic Compounds by EPA Method 8260B |           |         |                   |          |                         |          |        |       |
| Benzene  | EPA 8260B | AE51612 | 05/11/05          | 05/12/05 | 1                       | ND mg/kg | 0.0050 |       |
| Toluene  | "         | "       | "                 | "        | "                       | ND "     | 0.0050 |       |
| Ethylbenzene                                   | "         | "       | "                 | "        | "                       | ND "     | 0.0050 |       |
| Xylenes (total)                                | "         | "       | "                 | "        | "                       | ND "     | 0.0050 |       |
| Methyl tert-butyl ether                        | "         | "       | "                 | "        | "                       | ND "     | 0.0050 |       |
| Surrogate: Bromofluorobenzene                  | "         | "       | "                 | "        |                         | 104 %    | 68-113 |       |
| Surrogate: Dibromofluoromethane                | "         | "       | "                 | "        |                         | 111 %    | 40-140 |       |
| Surrogate: Toluene-d8                          | "         | "       | "                 | "        |                         | 116 %    | 61-119 |       |
| SB-16-14' (A505248-02)                         |           |         |                   |          |                         |          |        |       |
|  |           |         | Sample Type: Soil |          | Sampled: 05/05/05 13:05 |          |        |       |
| TPH by EPA/LUFT GC/GCMS Methods                |           |         |                   |          |                         |          |        |       |
| TPH as Diesel                                  | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 | 1                       | ND mg/kg | 3.0    | QB-03 |
| TPH as Gasoline                                | 8015GRO   | AE51306 | 05/10/05          | 05/17/05 | "                       | 1.5 "    | 1.0    |       |
| Surrogate: 1,4-Bromofluorobenzene              | "         | "       | "                 | "        |                         | 80.8 %   | 60-156 |       |
| Surrogate: 1,4-Bromofluorobenzene              | 8015DRO   | AE51315 | 05/13/05          | 05/13/05 |                         | 63.7 %   | 20-152 |       |

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

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CHEMICAL EXAMINATION REPORT

Page 3 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Alpha Analytical Laboratories, Inc.

|  | METHOD            | BATCH   | PREPARED | ANALYZED | DILUTION                | RESULT   | PQL    | NOTE |
|--|-------------------|---------|----------|----------|-------------------------|----------|--------|------|
| SB-16-14' (A505248-02)                         | Sample Type: Soil |         |          |          | Sampled: 05/05/05 13:05 |          |        |      |
| Volatile Organic Compounds by EPA Method 8260B |                   |         |          |          |                         |          |        |      |
| Benzene  | EPA 8260B         | AE51612 | 05/11/05 | 05/13/05 | 1                       | ND mg/kg | 0.0050 |      |
| Toluene  | "                 | "       | "        | "        | "                       | ND "     | 0.0050 |      |
| Ethylbenzene                                   | "                 | "       | "        | "        | "                       | ND "     | 0.0050 |      |
| Xylenes (total)                                | "                 | "       | "        | "        | "                       | ND "     | 0.0050 |      |
| Methyl tert-butyl ether                        | "                 | "       | "        | "        | "                       | ND "     | 0.0050 |      |
| Surrogate: Bromofluorobenzene                  | "                 | "       | "        | "        |                         | 108 %    | 68-113 |      |
| Surrogate: Dibromofluoromethane                | "                 | "       | "        | "        |                         | 122 %    | 40-140 |      |
| Surrogate: Toluene-d8                          | "                 | "       | "        | "        |                         | 120 %    | 61-119 | S-GC |

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Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005





Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

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CHEMICAL EXAMINATION REPORT

Page 4 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

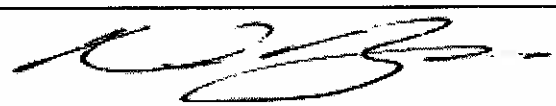
Client Code  
TRANSTEC

Client PO/Reference

SourceResult  
TPH by EPA/LUFT GC/GCMS Methods - Quality Control

| Analyte(s)                                  | Result | PQL | Units | Spike Level                   | Source Result | %REC                          | %REC Limits | RPD | RPD Limit | Flag  |
|---|--------|-----|-------|-------------------------------|---------------|-------------------------------|-------------|-----|-----------|-------|
| <b>Batch AE51306 - EPA 5030 Soil GC</b>     |        |     |       |                               |               |                               |             |     |           |       |
| <b>Blank (AE51306-BLK1)</b>                 |        |     |       | Prepared & Analyzed: 05/17/05 |               |                               |             |     |           |       |
| TPH as Gasoline                             | ND     | 1.0 | mg/kg |                               |               |                               |             |     |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 3.89   |     | "     | 4.00                          |               | 97.2                          | 60-156      |     |           |       |
| <b>LCS (AE51306-BS1)</b>                    |        |     |       | Prepared & Analyzed: 05/17/05 |               |                               |             |     |           |       |
| TPH as Gasoline                             | 20.3   | 1.0 | mg/kg | 24.0                          |               | 84.6                          | 77-139      |     |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 4.03   |     | "     | 4.00                          |               | 101                           | 60-156      |     |           |       |
| <b>LCS (AE51306-BS2)</b>                    |        |     |       | Prepared & Analyzed: 05/17/05 |               |                               |             |     |           |       |
| TPH as Gasoline                             | 20.9   | 1.0 | mg/kg | 24.0                          |               | 87.1                          | 77-139      |     |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 3.90   |     | "     | 4.00                          |               | 97.5                          | 60-156      |     |           |       |
| <b>Matrix Spike (AE51306-MS1)</b>           |        |     |       | <b>Source: A505248-02</b>     |               | Prepared & Analyzed: 05/17/05 |             |     |           |       |
| TPH as Gasoline                             | 19.6   | 1.0 | mg/kg | 24.0                          | 1.5           | 75.4                          | 72-138      |     |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 3.87   |     | "     | 4.00                          |               | 96.8                          | 60-156      |     |           |       |
| <b>Batch AE51315 - CA LUFT - orb shaker</b> |        |     |       |                               |               |                               |             |     |           |       |
| <b>Blank (AE51315-BLK1)</b>                 |        |     |       | Prepared & Analyzed: 05/13/05 |               |                               |             |     |           |       |
| TPH as Diesel                               | 1.75   | 1.0 | mg/kg |                               |               |                               |             |     |           | QB-03 |
| Surrogate: 1,4-Bromofluorobenzene           | 7.15   |     | "     | 11.6                          |               | 61.6                          | 20-152      |     |           |       |
| <b>LCS (AE51315-BS1)</b>                    |        |     |       | Prepared & Analyzed: 05/13/05 |               |                               |             |     |           |       |
| TPH as Diesel                               | 37.2   | 1.0 | mg/kg | 39.2                          |               | 94.9                          | 63-126      |     |           |       |
| Surrogate: 1,4-Bromofluorobenzene           | 8.41   |     | "     | 11.6                          |               | 72.5                          | 20-152      |     |           |       |
| <b>Matrix Spike (AE51315-MS1)</b>           |        |     |       | <b>Source: A505227-04</b>     |               | Prepared & Analyzed: 05/13/05 |             |     |           |       |
| TPH as Diesel                               | 35.6   | 1.0 | mg/kg | 39.2                          | ND            | 90.8                          | 61-134      |     |           |       |

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Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005



Alpha Analytical Laboratories Inc.

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CHEMICAL EXAMINATION REPORT

Page 5 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

| Analyte(s)                                  | Result | PQL                       | Units | Spike Level                              | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|---|--------|---------------------------|-------|--|---------------|------|-------------|------|-----------|------|
| <b>Batch AE51315 - CA LUFT - orb shaker</b> |        |                           |       |  |               |      |             |      |           |      |
| <b>Matrix Spike (AE51315-MS1)</b>           |        | <b>Source: A505227-04</b> |       | <b>Prepared &amp; Analyzed: 05/13/05</b> |               |      |             |      |           |      |
| Surrogate: 1,4-Bromofluorobenzene           | 8.00   |                           | "     | 11.6                                     |               | 69.0 | 20-152      |      |           |      |
| <b>Matrix Spike Dup (AE51315-MSD1)</b>      |        | <b>Source: A505227-04</b> |       | <b>Prepared &amp; Analyzed: 05/13/05</b> |               |      |             |      |           |      |
| TPH as Diesel                               | 36.4   | 1.0                       | mg/kg | 39.2                                     | ND            | 92.9 | 61-134      | 2.22 | 20        |      |
| Surrogate: 1,4-Bromofluorobenzene           | 7.91   |                           | "     | 11.6                                     |               | 68.2 | 20-152      |      |           |      |

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Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005





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CHEMICAL EXAMINATION REPORT

Page 6 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                           | Result  | PQL    | Units | Spike Level                           | Source Result | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|--------------------------------------|---------|--------|-------|---------------------------------------|---------------|------|-------------|-------|-----------|------|
| <b>Batch AE51612 - EPA 5035 GCMS</b> |         |        |       |                                       |               |      |             |       |           |      |
| <b>Blank (AE51612-BLK1)</b>          |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |       |           |      |
| Benzene                              | ND      | 0.0050 | mg/kg |                                       |               |      |             |       |           |      |
| Toluene                              | ND      | 0.0050 | "     |                                       |               |      |             |       |           |      |
| Ethylbenzene                         | ND      | 0.0050 | "     |                                       |               |      |             |       |           |      |
| Xylenes (total)                      | ND      | 0.0050 | "     |                                       |               |      |             |       |           |      |
| Methyl tert-butyl ether              | ND      | 0.0050 | "     |                                       |               |      |             |       |           |      |
| Surrogate: Bromofluorobenzene        | 0.0237  |        | "     | 0.0250                                |               | 94.8 | 68-113      |       |           |      |
| Surrogate: Dibromofluoromethane      | 0.0256  |        | "     | 0.0250                                |               | 102  | 40-140      |       |           |      |
| Surrogate: Toluene-d8                | 0.0276  |        | "     | 0.0250                                |               | 110  | 61-119      |       |           |      |
| <b>LCS (AE51612-BS1)</b>             |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |       |           |      |
| Benzene                              | 0.00438 | 0.0050 | mg/kg | 0.00500                               |               | 87.6 | 72-123      |       |           |      |
| Toluene                              | 0.00520 | 0.0050 | "     | 0.00500                               |               | 104  | 72-126      |       |           |      |
| Ethylbenzene                         | 0.00491 | 0.0050 | "     | 0.00500                               |               | 98.2 | 71-125      |       |           |      |
| Xylenes (total)                      | 0.0149  | 0.0050 | "     | 0.0150                                |               | 99.3 | 67-127      |       |           |      |
| Methyl tert-butyl ether              | 0.00576 | 0.0050 | "     | 0.00500                               |               | 115  | 71-127      |       |           |      |
| Surrogate: Bromofluorobenzene        | 0.0274  |        | "     | 0.0250                                |               | 110  | 68-113      |       |           |      |
| Surrogate: Dibromofluoromethane      | 0.0228  |        | "     | 0.0250                                |               | 91.2 | 40-140      |       |           |      |
| Surrogate: Toluene-d8                | 0.0296  |        | "     | 0.0250                                |               | 118  | 61-119      |       |           |      |
| <b>LCS Dup (AE51612-BS1)</b>         |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |       |           |      |
| Benzene                              | 0.00441 | 0.0050 | mg/kg | 0.00500                               |               | 88.2 | 72-123      | 0.683 | 25        |      |
| Toluene                              | 0.00492 | 0.0050 | "     | 0.00500                               |               | 98.4 | 72-126      | 5.53  | 25        |      |
| Ethylbenzene                         | 0.00464 | 0.0050 | "     | 0.00500                               |               | 92.8 | 71-125      | 5.65  | 25        |      |
| Xylenes (total)                      | 0.0140  | 0.0050 | "     | 0.0150                                |               | 93.3 | 67-127      | 6.23  | 25        |      |
| Methyl tert-butyl ether              | 0.00561 | 0.0050 | "     | 0.00500                               |               | 112  | 71-127      | 2.64  | 25        |      |
| Surrogate: Bromofluorobenzene        | 0.0263  |        | "     | 0.0250                                |               | 105  | 68-113      |       |           |      |

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Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005



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CHEMICAL EXAMINATION REPORT

Page 7 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

Volatile Organic Compounds by EPA Method 8260B - Quality Control

| Analyte(s)                           | Result  | PQL    | Units | Spike Level  | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|--------------------------------------|---------|--------|-------|--|---------------|------|-------------|-----|-----------|------|
| <b>Batch AE51612 - EPA 5035 GCMS</b> |         |        |       |  |               |      |             |     |           |      |
| <b>LCS Dup (AE51612-BSD1)</b>        |         |        |       | Prepared: 05/11/05 Analyzed: 05/12/05                    |               |      |             |     |           |      |
| Surrogate: Dibromofluoromethane      | 0.0270  |        | "     | 0.0250   |               | 108  | 40-140      |     |           |      |
| Surrogate: Toluene-d8                | 0.0285  |        | "     | 0.0250   |               | 114  | 61-119      |     |           |      |
| <b>Matrix Spike (AE51612-MS1)</b>    |         |        |       | Source: A505248-01 Prepared: 05/11/05 Analyzed: 05/12/05 |               |      |             |     |           |      |
| Benzene                              | 0.00436 | 0.0050 | mg/kg | 0.00500  | ND            | 87.2 | 49-137      |     |           |      |
| Toluene                              | 0.00511 | 0.0050 | "     | 0.00500  | ND            | 102  | 50-148      |     |           |      |
| Ethylbenzene                         | 0.00454 | 0.0050 | "     | 0.00500  | ND            | 90.8 | 55-138      |     |           |      |
| Xylenes (total)                      | 0.0133  | 0.0050 | "     | 0.0150   | ND            | 88.7 | 54-139      |     |           |      |
| Methyl tert-butyl ether              | 0.00556 | 0.0050 | "     | 0.00500  | ND            | 111  | 50-140      |     |           |      |
| Surrogate: Bromofluorobenzene        | 0.0244  |        | "     | 0.0250   |               | 97.6 | 68-113      |     |           |      |
| Surrogate: Dibromofluoromethane      | 0.0263  |        | "     | 0.0250   |               | 105  | 40-140      |     |           |      |
| Surrogate: Toluene-d8                | 0.0280  |        | "     | 0.0250   |               | 112  | 61-119      |     |           |      |

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Nena M. Burgess For Sheri L. Speaks  
Project Manager

5/19/2005



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**CHEMICAL EXAMINATION REPORT**

Page 8 of 8

Trans Tech Consultants  
930 Shiloh Rd., Bldg.44, Suite J  
Windsor, CA 95492  
Attn: Bill Wiggins

Report Date: 05/19/05 16:30  
Project No: 3057.01  
Project ID: Fern Cafe

Order Number  
A505248

Receipt Date/Time  
05/09/2005 12:00

Client Code  
TRANSTEC

Client PO/Reference

**Notes and Definitions**

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates.

QB-03 The method blank contains analyte at a concentration above the MRL; sample reporting limits were raised as necessary.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

PQL Practical Quantitation Limit

| Company Name:                         |              | Project Name:               |      | Project Number: |        |
|---------------------------------------|--------------|-----------------------------|------|-----------------|--------|
| Mailing Address:                      |              | Project Address:            |      | Quote #         |        |
| Project Contact (Hardcopy or PDF to): |              | P.O. #                      |      | Bill to:        |        |
| Phone/Fax:                            |              | Sampling                    |      | Container       |        |
| Sample Designation                    |              | Date Time                   |      | Preservative    |        |
| Sample Designation                    |              | Date Time                   |      | Matrix          |        |
| SB-15-5.5                             | 5-5-07 11:25 | 40ml VOA                    | Poly | Amber           | Sleeve |
| SB-15-8.5                             | 11:36        |                             |      |                 |        |
| SB-15-7.0                             | 11:30        |                             |      |                 |        |
| SB-15-13.0                            | 11:50        |                             |      |                 |        |
| SB-16-5.5                             | 12:50        |                             |      |                 |        |
| SB-16-10.5                            | 12:55        |                             |      |                 |        |
| SB-16-14                              | 1:05         |                             |      |                 |        |
| SB-17-10                              | 4:05         |                             |      |                 |        |
| SB-17-14                              | 4:10         |                             |      |                 |        |
| SB-18-10                              | 5:40         |                             |      |                 |        |
| Relinquished by:                      |              | Received by:                |      | Date            |        |
| Relinquished by:                      |              | Received by:                |      | Date            |        |
| Relinquished by:                      |              | Received for Laboratory by: |      | Date            |        |

Signature below authorizes work under terms stated on reverse side.

Signature: *[Signature]*

Analysis Request

TAT

24 hr ☐

48 hr ☐

Lab ☐

Approval ☐

Required ☐

1 wk ☐

2 wk (standard) ☒

| Sample Designation | Date   | Time  | Matrix | Container | Preservative | Matrix | Analysis Request | TAT             |
|--------------------|--------|-------|--------|-----------|--------------|--------|------------------|-----------------|
| SB-15-5.5          | 5-5-07 | 11:25 | Soil   | Amber     | Sleeve       | None   | Top-g/BTEX/MTBE  | 24 hr           |
| SB-15-8.5          | 11:36  |       | Water  |           |              |        | Top-diesel       | 48 hr           |
| SB-15-7.0          | 11:30  |       | None   |           |              |        |                  | Lab             |
| SB-15-13.0         | 11:50  |       | H2SO4  |           |              |        |                  | Approval        |
| SB-16-5.5          | 12:50  |       | HNO3   |           |              |        |                  | Required        |
| SB-16-10.5         | 12:55  |       | HCL    |           |              |        |                  | 1 wk            |
| SB-16-14           | 1:05   |       |        |           |              |        |                  | 2 wk (standard) |
| SB-17-10           | 4:05   |       |        |           |              |        |                  |                 |
| SB-17-14           | 4:10   |       |        |           |              |        |                  |                 |
| SB-18-10           | 5:40   |       |        |           |              |        |                  |                 |

Relinquished by:

Relinquished by:

Relinquished by:

Received by:

Received by:

Received for Laboratory by:

Date

Date

Date

Signature below authorizes work under terms stated on reverse side.

Signature: *[Signature]*

Analysis Request

TAT

24 hr ☐

48 hr ☐

Lab ☐

Approval ☐

Required ☐

1 wk ☐

2 wk (standard) ☒

| Sample Designation | Date   | Time  | Matrix | Container | Preservative | Matrix | Analysis Request | TAT             |
|--------------------|--------|-------|--------|-----------|--------------|--------|------------------|-----------------|
| SB-15-5.5          | 5-5-07 | 11:25 | Soil   | Amber     | Sleeve       | None   | Top-g/BTEX/MTBE  | 24 hr           |
| SB-15-8.5          | 11:36  |       | Water  |           |              |        | Top-diesel       | 48 hr           |
| SB-15-7.0          | 11:30  |       | None   |           |              |        |                  | Lab             |
| SB-15-13.0         | 11:50  |       | H2SO4  |           |              |        |                  | Approval        |
| SB-16-5.5          | 12:50  |       | HNO3   |           |              |        |                  | Required        |
| SB-16-10.5         | 12:55  |       | HCL    |           |              |        |                  | 1 wk            |
| SB-16-14           | 1:05   |       |        |           |              |        |                  | 2 wk (standard) |
| SB-17-10           | 4:05   |       |        |           |              |        |                  |                 |
| SB-17-14           | 4:10   |       |        |           |              |        |                  |                 |
| SB-18-10           | 5:40   |       |        |           |              |        |                  |                 |

Relinquished by:

Relinquished by:

Relinquished by:

Received by:

Received by:

Received for Laboratory by:

Date

Date

Date

Signature below authorizes work under terms stated on reverse side.

Signature: *[Signature]*

Analysis Request

TAT

24 hr ☐

48 hr ☐

Lab ☐

Approval ☐

Required ☐

1 wk ☐

2 wk (standard) ☒

| Sample Designation | Date   | Time  | Matrix | Container | Preservative | Matrix | Analysis Request | TAT             |
|--------------------|--------|-------|--------|-----------|--------------|--------|------------------|-----------------|
| SB-15-5.5          | 5-5-07 | 11:25 | Soil   | Amber     | Sleeve       | None   | Top-g/BTEX/MTBE  | 24 hr           |
| SB-15-8.5          | 11:36  |       | Water  |           |              |        | Top-diesel       | 48 hr           |
| SB-15-7.0          | 11:30  |       | None   |           |              |        |                  | Lab             |
| SB-15-13.0         | 11:50  |       | H2SO4  |           |              |        |                  | Approval        |
| SB-16-5.5          | 12:50  |       | HNO3   |           |              |        |                  | Required        |
| SB-16-10.5         | 12:55  |       | HCL    |           |              |        |                  | 1 wk            |
| SB-16-14           | 1:05   |       |        |           |              |        |                  | 2 wk (standard) |
| SB-17-10           | 4:05   |       |        |           |              |        |                  |                 |
| SB-17-14           | 4:10   |       |        |           |              |        |                  |                 |
| SB-18-10           |        |       |        |           |              |        |                  |                 |



**DISTRIBUTION LIST**  
**Investigation Summary Report**  
**May 24, 2005**  
**Job No. 3057.01**  
**Fern Cafe**  
**606 Main Street**  
**Ferndale, California**

Mr. Mark Verhey  
Humboldt County Department of Public Health  
Division of Environmental Health  
100 H Street, Suite 100  
Eureka, California 95501

Ms. Kasey Ashley  
North Coast Regional Water  
Quality Control Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, California 95403

